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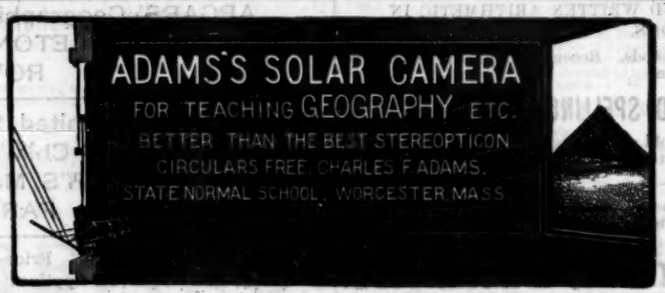


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# The School Journal.


ESTABLISHED 1870.

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THE SCHOOL JOURNAL.

*A WEEKLY JOURNAL OF EDUCATION.*

AMOS M. KELLOGG, } EDITORS.
JEROME ALLEN, }

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New York, Sept 19, 1885.


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THE boys of to-day that are going to rule in the next generation are those who get to the bottom of things, those who don't take things for granted, and keep their answers inside the truth. The boy who steals his examination papers will steal his employer's money some day. The man is generally certain to end where the boy begins.

THERE is a great difference between a man who discovers a fact and one who discovers an account of one. A Washington astronomer, who has a mania for original facts, present at a recent marriage reception, was asked if he had paid his respects to the bride. "No,' was the answer, "I have not. I have no facts to communicate."

THE girl of all work receives in England a salary of £24, no slight amount when board and lodging are taken into account. The governess, however, who must be a lady, and hold herself responsible for the mental training of the children, stands, of course, on a totally different footing. A lady who can teach French, music, and drawing, and a great deal besides, and who is swift with the needle, is able to command, in an opulent community like Manchester, the astounding remuneration of £13 a-year.

THE murderous passion is often developed quite young. Several remarkable cases of murder by boys have lately been reported in France. The latest is that by a youth of fifteen, who killed a lad three years younger than himself because his victim had been successful in obtaining a situation desired by the murderer. Still more recently we have the news from Spires, in Germany, of a conspiracy in which nine pupils of a high school conspired to murder a master whom they disliked. In this case a loaded revolver had been obtained, and two daggers, when the plot was frustrated by the confession of one of the boys. All that can be safely said as to the possible connection of such crimes with extended education is that the larger amount of knowledge in the possession of boys at present must suggest to those of depraved minds, means and opportunities of crime which could not be known to the youth of former times.

PROFESSOR PAYNE, of Ann Arbor, thinks that the creed of the new education is expressed in the text: *We learn to do by doing.* This, it seems to us, is not so much its fundamental principle as the Pestalozzian doctrine, viz.: *That method of teaching is the best that leads the pupil to investigate for himself.* But, however this may be, it is Professor Payne's opinion that "the term quackery has been set apart to express the common contempt for the practice of learning to do by doing." He thinks that "knowing is the necessary preparation for doing." It is often amusing for children to set up a man of straw simply for the purpose of knocking it down, but it is not dignified business for professional psychologists. No one has ever advocated the practice of doing without thinking. Frœbel's effort was to promote knowing through doing, and in this he followed Pestalozzi, and Pestalozzi followed all true teachers since the world began. The only possible way we have of obtaining knowledge is through the activity of the senses. It is thus received and in like manner exhibited. The activity of a machine is not education, because there is no brain in it; but the activity of the hand, and eye, and ear is, and ever must be, educating, unless the brain is paralyzed, or its motions automatic. The design of *education* by doing is to promote knowing, and this it always does. Professor Payne says: "We have to do by knowing." But how can we know what first we do not do? In other words, how can we know unless there is an activity of the senses? It is impossible. This activity is doing. It must be, then, that we learn by doing. In what other way can we train the mind? Some educational crank may be compelling his pupils to blindly do all sorts of things without a system, but he is not a follower of Socrates, Plato, Bias, Aristotle, Bacon, Rousseau, Pestalozzi, Froebel, Horace Mann, or Col. Parker. He is of a school in teaching that as yet has few scholars.

THE new education is simply the application of common sense principles to the training of the young. Whatever is beyond the region of sound sense, is also beyond the region of sound education, and the only things we need to have settled more completely are the limits and principles of good sound sense. But it is a little singular that there are so many who do not know what this is, and it is hard to convince them that certain methods of instruction are entirely outside the limits of reason and right. We are creatures of custom and habit, and become fully convinced in early life that certain most absurd things are right, simply because we are accustomed to them. Our fathers did so. So do we. Because hereditary maxims have come to us from our ancestors, we cherish them as household gods, not to be removed by the profane hands of a new generation. The new education meets with opposition because *it is new.* It is the same unpardonable sin of being young that has all along been almost an insuperable barrier to progress. Another obstacle is the crime of locality. Boston believes that New York is socially and educationally on the borders of a barbarous land. A few years ago Senator Hoar spoke of Williams College as "an outpost of civilization against New York." When Grant and Lincoln both came from Illinois the cry went up from New England, "Can any good thing come out of the West?" This crime of locality is a barrier to progress. It is a little laughable that certain tender-footed educators cannot find it in their hearts to advocate the new education until they first prove that it is not new. They are prepared to help it along as soon as they prove to their own satisfaction that it is not guilty of the atrocious crime of being young. The new education *is new,* and in this is its glory. On old foundations a new building is rising which is already assuming proportions of beauty and strength.

One of the excellent moves in Boston is the summer cooking schools and the general revival of the art and accomplishment of good cooking.

Two experienced primary and three well qualified intermediate teachers can find places if they apply at once to us.

A bill is before the Georgia Legislature to tax all unmarried men under thirty years of age $2.50 a year for the school fund.

Dakota will knock at the door of the Union next winter with a strong and imperative thump. A careful census of that territory, just completed, shows a population of 415,000 persons. The total number of farms in the territory is 80,000, varying in area from 6,000 acres down. Congress may as well prepare to show Dakota into the parlor.

Among the professors at German universities there are at the present time no fewer than 157 who are between the ages of 70 and 90, of whom 122 still deliver lectures, seven of these being between 85 and 89 years of age. The oldest is Von Ranke, now in his 90th year. Elennich, of Breslau, is only 39 days younger, and still shows energy in anything he puts his hand to.

James Russell Lowell in his recent address at Ashfield, Mass., says that it seems to him that we are in danger of falling back too complacently upon our school system. Because our common schools teach so much, we are apt to think we can dispense with the education of the household—this training of the actual life, this teaching people that without hard work there is no reward in life.

Edward Everett Hale has written a letter to the *Herald of Health*, brimful of sensible suggestions to brain-workers. Among his precepts are these: Have sleep enough, and sleep well. Do not excite the brain before bed-time. Never go to bed in danger of being hungry. Avoid all intricate study of any kind for six hours before going to bed. Do not work immediately after dinner. Keep your conscience clear.

In this number we print the third of the articles prepared at our request by Rev. S. W. Powell, of Brooklyn, N. Y., a teacher of experience, on "Arithmetical Health-Lifting." Many teachers engaged in the work of the American Missionary Association will remember articles on the work of the A. M. A., and on Berea College, prepared by Mr. Powell for the New York *Evening Post*.

Prof. A. S. Hill, of Harvard, says: "It is high time that every vestige of the Lindley Murray system, parsing, analysis of sentences, and the like, as well as grammatical rules and exceptions, was swept out of the schools. Even the names of the parts of speech might be left to take care of themselves, as the names of the letters of the alphabet are left in the case of children who learn to read by words instead of letters. The main point is, not that a child should know that a given word in a sentence is a noun, but that he should understand the meaning of a sentence as a whole."

California is proposing to publish her own school books. She thinks that those published by private enterprise are too expensive, but she will find before she is through with the experiment she proposes to try, that state text-books are much more expensive and unsatisfactory than those afforded by the old book firms. Text-books are the cheapest books now in the market, considering quality of composition, paper, printing, and binding. Let California study the results of state text-books in other parts of the country. She will then be able to act intelligently.

Public School No. 9, Brooklyn, has organized a "Relief Fund Society." Its constitution states that "its objects shall be the relief of sick and destitute children, and to visit sick members in any class as often as once a week, for the purpose of reading to them or giving them any attention which will relieve the tedium of sickness.

1. By furnishing delicacies during illness and convalescence to such as cannot otherwise obtain them.

2. By furnishing toys and reading matter suitable for such sick children.

3. By sending to the country or seaside during the summer one or more sick children."

The *Educational Weekly* says that in this day of school work the three R's have given place to four arts:

1. The art of getting accurate and available knowledge from the things about us. The art of using our senses—observation.

2. The art of expressing clearly and systematically what is learned. The stress upon language lessons indicates that this art is getting into the schools pretty thoroughly.

3. The sacred art of getting out of books what is in them. This is thought teaching. It gives to the learner a key with which he may unlock the storehouse of knowledge and roam at will through all its labyrinths. Books are the depositories of the recorded knowledge of the race.

4. The art of using what we know. This is the practical side of education. It is also the bread side.

At the numerous educational gatherings, many valuable things are said, suggestions that help many teachers to overcome special difficulties. Many others could be helped if those that hear would take pains to tell others. Improvement of individuals improves the profession, and the improvement of the profession returns additional improvement and better salaries to the individual teachers. "When found make a note of," whether it be valuable suggestions or interesting bits of news about leading men and women in the profession, note it down and send it to us, that we may give it wider circulation, and make the Journal still more a means of assistance to its readers.

Supt. Raub, of Cohoes, N. Y., thinks that color-blindness is a humbug, and that hundreds of railroad men have lost their positions for no other reason than that they could not name colors. He says color-blindness is rare with women, because from an early age they begin to learn the names of the different colors by their purchases of ribbons. On his recommendation the teaching of colors will hereafter be one of the features in all the schools of Cohoes. This theory may be very well, so far as it relates to secondary colors and shades that are at all uncommon. It takes a trained eye to see the difference between cherry color, scarlet, and bright cardinal, for instance; but when there is an inability to distinguish red from green, we doubt whether primary education will remedy it. It is, however, a good idea to teach colors in school, and there are few primary schools where pupils do not receive some instruction of the sort.

Gradually better ideas of the treatment criminals should receive are becoming general. Formerly an offender against the laws was supposed to merit only punishment, but lately the idea of reformation is becoming prevalent.

At the Elmira Reformatory in this state are gathered 600 convicts, of every grade of crime, from petty larceny to arson and manslaughter. They are sent there not to be punished, *but to be cured*. When a prisoner is delivered at the Reformatory the Superintendent commences at once an investigation of his case, examines him personally, estimates the possibility of his character both for good and for evil, inquires into his heredity, his early education, his associates, forms a plan for his recovery to honesty and virtue, and sets himself to accomplish it.

In reference to this plan, Rev. Dr. Lyman Abbot says that "in spite of a community only half Christanized, in spite of sectarian differences that prohibit the full and free use of the Christian religion in the work of reformation, eighty-one per cent. of the inmates of the Reformatory, when they graduate, go back to the community to prove the genuineness of their reform by lives of honest industry. Nature forgives sins against the laws of nature, and society is beginning to forgive, though in a grumbling and half-hearted way, sins against the laws of society."

Forgiveness of offences is a godlike quality in a teacher. He must not only learn to forgive offences, but forget them, when the offender shows evidence that he has returned to the ways of obedience. The design of school discipline is to make those subject to it better. A good government is an enjoyable government. We are not made better by being made to eat the bitter herbs of remorse. There must be government, but it must be of the right kind if it is to do its subject any permanent good.

Will some one who knows give us three valid arguments in favor of uniformity of text-books in a county or state? Uniformity means that all *must* use the same books whether they like them or not. All others must be ruled out. There must be only one kind of a geography in a county, and it must be contrary to law to buy and use any other, no matter if the new one is much superior to the one in use. This text-book uniformity according to law is one of the most fraudulent humbugs of the present age. Why under the azure blue above us a district cannot be permitted to buy what kind of school books they want, as well as the kind of coffee they wish, we cannot tell. Why not, under plea of cheapness, legislate concerning the kind of cloth men should buy for coats? If a law of cloth-uniformity should be carried into effect it would wonderfully cheapen garments.

The greatest objection to state or county uniformity is the danger of jobs. It turns a large amount of money into somebody's till, and when a golden prize is offered it is human nature to try to get it, honestly if possible—*but get it*. We commend our brethren to the history of the text-book law in Minnesota. Let them send a commission there and inquire and learn wisdom.

We are living in an era of law hallucination. It seems to be believed that *a law* may be made the end of all evil. Does the Kansas prohibition law do away with the drinking of liquor? We believe in prohibition, but the law should follow public sentiment. It never will and never can go before it and do any good. Regeneration by law is an exploded dogma. Underneath law there must be a deep current of popular consent.

It is not believed by the best teachers that it is best to turn out all series except one from the schools. Five kinds of geographies are better than one, if the teacher knows how to teach. Uniformity and text-book cramming generally go hand in hand. "Learn this book!" is the language of an old-time teacher, but a live teacher says: "Bring in all the books you have, old and new, good and bad, let us have a collection. It is a poor book, indeed, that contains no good things. Our lesson in arithmetic to-morrow will be cube root. See how the authors explain it, and extract the roots of five numbers each containing not less than eight figures." In the geography class this teacher says: "Bring in all the geographies you have. Our lesson to-morrow will be England. Find out three facts concerning each of the cities of London, Liverpool, and York. You may also make a map of England on paper, drawing all the rivers and locating correctly ten principal cities." This is a "live" lesson and given by a live teacher, and the pupils in that school will soon learn to "investigate for themselves." But turn out all the geographies except one, fence up the county, and light is kept away. The doctrine is a wrong one.

We live in an age of excellent text-books, and our pupils want to get the best, and these are usually the latest. Some cry out on account of expense. Well, what if it does cost a little more than the old fogy plan of uniformity for a decade? Is there not benefit enough to pay for the extra

money expended? *Our text-books are the cheapest books in the market*, and they are growing cheaper yearly.

Does not the farmer get a new reaper as soon as he sees one that saves more labor than the old one? How about plows, and harvesters, and churns, and stoves, and a thousand other things? The newest are sold by the thousand if they are the best. The farmer grumbles because he has to buy new text-books for Sally when the old ones were good enough for her sisters Sarah and Jane, before they were married. He growls and says: "Use your old books"; but this same farmer goes to town the *same day*, and buys a new cultivator, when he has half a dozen old ones knocking around the farm. He appreciates a new machine, but he has no sort of reverence for a new school book. We trust our law makers will have wisdom given them to let the people buy what books they please.

## *A SCHOOL SAVINGS BANK.*

By Com. J. H. Thiry, Long Island City.

The following regulations were drawn up after three months' trial of the School Savings Bank in the Third Ward in this city. The work of collecting the money from the classes has been reduced to fifty or sixty per cent. of the time as compared with the Belgian and French *modus operandi* which I have in my possession.

My regulations offer the same security, if not better, for depositors. A few small details that I did not consider necessary to mention here are left to the judgment of the teacher.

Since the sixteenth of last March, when we commenced the banking system in our school, with an attendance of 400 scholars, they have saved about $450, and nearly 300 have received bank books. This shows a good result without enumerating the benefits that are to be derived in the future for our children. I do not consider this the place to give an account of the numerous instances of satisfaction and praise that our teachers and I have received from our scholars and their parents, but, in my estimation, no school ought to be without this system.

If we were to suppress it in the future we would displease a great majority of our best friends and discourage our children, who are very much interested in its development.

The Long Island City Savings Bank has a share in the success of our new innovation, and it would be unfair on my part if I did not acknowledge here that all the members of that flourishing institution have offered to our teachers and myself without ostentation and for a very small renumerative compensation, all the encouraging means the rules of that corporation can allow to any undertaking like ours.

This modest testimonial in their favor is not adequate to the good they have done for the young people, who will praise them, not only for having established among us an institution where the savings of our artisans can be taken care of, but for having also encouraged our young citizens in the great undertaking of saving an apple to quench the thirst.

REGULATIONS.

Every Monday only, the teacher of each class, in calling the roll, will receive the savings of the pupils—one cent and upwards.

In making his first deposit, the pupil receives a card (as No. 1) with his name, date, and amount of deposit receipted by his teacher. This card is to be kept by the scholar and must be presented every Monday, if he has a deposit to add to his credit.

To facilitate the collections, the teacher of each class selects one of her pupils as collector, whose duty it is to take the card and the money from each depositor, and hand it to the teacher who counts the money, receipts the card and returns it to the scholar. By so doing, the pupil is not disturbed from his place, and confusion is prevented in the class room. Ten or fifteen minutes is considered sufficient time to collect the money of a class of fifty pupils.

No additional book is required by the teacher to record the amount of deposits; the roll book is sufficient for each teacher.

In calling the roll, the teacher records upon the roll book, and opposite the name of the pupil, the amount of money deposited.

When the name of the pupil is called, he answers: "*Two cents*," etc., if he has two cents for the bank. The teacher records two cents in the column. If he has nothing saved he answers *nothing*, and the teacher makes a mark to that effect.

When a teacher has collected all the pennies of her class, she sends the amount to the principal, who is the *de facto* treasurer, and who has a special book with the names of all the depositors and amount deposited by each.

After the afternoon session the Principal sends the money to the Savings Bank, which gives a receipt for the amount and adds it to the credit of the principal.

The last Monday of every month, when sending the money collected on the same day from the school, the principal gives a list of the names of depositors and amount of each to be recorded in the journal of the Savings Bank, and to be inscribed in the bank book of each scholar who has contributed.

Amounts less than ten cents are not recorded in the above journal; the money is kept in the bank to the credit of the Principal.

As a general rule the bank books of the pupils are kept by the principal in the school. They are sent to the bank once a month to add the new deposits for the past four weeks, and returned two days after to the principal, who allows the pupils to take them home once a month, on Friday, to be returned the following Monday.

To facilitate the work, the bank books of each class (seven in number) are kept separately in a galvanized iron box, with as many compartments as there are classes. In case of fire they are therefore safe.

When a pupil has a deposit of twenty-five cents or more he is entitled to a bank book free of cost, and deposits will draw interest only when the amount is three dollars or over.

As long as the pupil attends school his bank book is kept by the principal, but at vacation, or when a pupil leaves the school, the bank book will be handed to him; he can withdraw his money then, but must have the consent of his parents and the signature of the principal, without which he cannot withdraw it.

It is advisable, if the depositors desire to withdraw any money, to leave a few cents to their credit, so as to keep the account with the bank open; if not he will have to pay ten cents to the bank unless his deposits are over three dollars.

For the School Journal.

## *GEOGRAPHY IN THE GERMAN SCHOOLS.*

### No. II.

By L. Seeley, Jr.

IV. *Visit to the Battle-Field.*—On the following day, at 1 P. M., the pupils assembled at the school, about one hundred and fifty in number, varying in age from seven to thirteen. The most of them were provided with a white cap. The line was formed under command of about twenty teachers and students of the Teachers' Seminary. At the head was a band of music consisting of two drums, two fifes, and two brass instruments, all played by the boys of the school. A drum-major, with his long staff, preceded them. Following the band was a red flag having the words, "Frisch, Frei, Fröhlich, Fromm" (fresh, free, cheerful, pious,) in large white letters. Thus in military order they marched through the streets to the music of the band, the people lining the sidewalks and coming to the windows. The march leads out into the country to the battle-field, about a mile distant. On one of the highest hills stands a stone called the "Napoleon stein," marking the point where the great general stood when the battle began. Here a halt was called, and the pupils formed a semi-circle with the teacher in the centre. A vast panorama is spread out before them. At their feet lies the city of Jena on the bank of the winding Saale. On the opposite side of the valley are Hausberg, Jenzig, and the Kern Berge, distinct peaks with deep valleys between. The villages of Camsdorf, Wöllnitz, Kunitz, Löbstedt, Zwätzen, Closwitz, Gospeda, and Lichtenhain can be seen. The teacher first questions in regard to the geography as follows:

Teacher. Where are we standing?

Pupils. We are standing upon the Landgrafen Berg, near the Napoleon Stein.

T. Point to the East.

Pupils point; the teacher in this way fixes all the points of the compass.

T. What city lies below us?

P. The city Jena lies below us.

T. What river do we see?

P. We see the Saale.

T. Where is the Hausberg?

P. (Pointing.) Yonder is the Hausberg.

T. Point to Lichtenstein.

P. That is Lichtenstein.

T. What valley is that?

P. That is the valley of the Saale.

T. Name the three mountains opposite.

P. The three mountains opposite are the Jenzig, the Hausberg, and the Kern mountains.

T. Which lies farthest south?

P. The Kern mountains lie farthest south.

T. In what direction is Closwitz from us?

P. Closwitz lies north of us.

T. Point to Vierzehnheiligen.

P. Vierzehnheiligen also lies north of us.

In this way not only the points connected with the battle, but other geographical surroundings were marked, the pupils always pointing to the objects and *always speaking in sentences*.

The localities of the neighboring cities were fixed by distant mountains near which they lie, especially those connected with the battle, from which the armies came and to which the Prussians retreated. Thus by many skillful questions the pupils were thoroughly familiarized with the geography of Jena. Geography was made a real subject, brought to their comprehension as it could not be by simply learning it from books. The study of geography from books alone transports the pupil to some distant realm and leads him to feel that he is studying something apart from himself and as unreachable as the distant stars. Indeed it is quite like the study of astronomy. But by this method it is made real and mundane; it is brought directly to the pupil's consciousness. He sees a mountain, a valley, a river, a lake, or waterfall and then he comprehends the definition of it. He finds that he is studying some real thing; he comprehends, and there is growth. From the study of what he can see, he goes out to those things just beyond his vision, then still farther, and still farther until the whole world is embraced.

The first, second and third years in school are given to local geography ("Heimats Kunde"), including the study of the surroundings, the points of compass, directions, definitions of geographical terms developed from the study of nature as far as may be. The molding board is never used in the German schools. In the fourth year, the generally accepted practice is to study the globes, learning the oceans, continents, most important countries, rivers, seas, mountains, and cities. The seasons and motions of the earth are studied. It is argued that at this point, the pupil is able to grasp the idea of the earth in this entirety, an that he should be withdrawn from the little world in which he lives and which he has studied, and be introduced to the great globe on which he lived as a whole, and thus the end to be reached in the study of geography, as well as the truths of the magnitude, shape, and motions of the earth revealed to him.

In the fifth year return is made to local geography. This is reviewed and the province taken. In the sixth year, Germany; in the seventh, all Europe; in the eighth, the rest of the world.

## THE SCHOOL-ROOM.

For the SCHOOL JOURNAL.

### *A NEW METHOD IN ZOOLOGY.**

This method involves a series of card games based upon a careful preparation of the subject matter, and appears to be simple and effective. A teacher who has tried it informs us that, with children from 8 to 15 years of age, he attained highly favorable results.

To use this method, divide the children into groups of four each, assigning a pack of the cards to each group. Those opposite are partners. If the cards represent *vertebrate* or *back-boned* animals, explain to them that there are 13 birds, 13 fish, 13 reptiles, and 13 mammals in the pack, distinguished by the word in largest type.

These classes are each numbered from 1 to 13, 13 being the highest in each class. One player deals out all of the cards, one at a time, beginning at the left. The last card determines which of the four classes is to rule. The player at the left leads a card, the others follow with suit cards, i.e., cards of the same class, if they have them, if not, a player is at liberty to play a ruling card. The partners capturing six times place their results together as a *book*, and each capture thereafter counts one in the game of seven points.

Similarly explain the cards representing *Invertebrate* animals and the four classes. After they have played three or four games with each pack, explain to them the differences between vertebrates and invertebrates, and point out some of the leading characteristics of the classes. Use a few judicious questions and you may be surprised at what they will tell from merely observing the pictures.

*Do not have them learn the sub-classes, orders, or scientific names. These are placed on the cards for the benefit of older students.*

ZOÖNOMIA.

After they have attained some familiarity with the class differences, teach them how to play Zoönomia. In this game any number of players up to 10 may engage. Call their attention to the back of each card and the 22 topics to be found there, as follows:

Also call their attention to the fact that on the

VERTEBRATA.

*AVES.* SCANSORES. (*H.*)
(climbers.)

12. PICARIÆ.
(fishers.)

**Belted Kingfisher.** *Ceryle alcyon.*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| (20) | (63) | (102) | (56) | (97) | (100) | (41) | (61) | (48) | (93) | (24) |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| (90) | (46) | (102) | (12) | (103) | (102) | (96) | (69) | (88) | (98) | (53) |

front of each card below the picture and name, are 22 numbers in small type corresponding to the topic on the back. Underneath each of these numbers is a number in larger type, showing the rank of the animal with regard to each topic, as at the bottom of the card above

There being 104 cards in the two packs, these grade numbers extend from 1 to 104. Thus under topic 2, *Age*, the shortest-lived animals rank 1, 2, etc., and the Whale, living 400 years, ranks highest, 104. Each player receives 5 cards. One player selects a topic as the basis of play for that hand, or until the 5 cards are used. He should select that topic in which his cards rank highest, although at first he may select any topic. The game then is entirely under the topic selected, the one playing the card ranking highest under that topic, scoring one point in the game. The player scoring ten points first wins the game. Suppose there are four players, and the topic selected is Skeleton, topic 18. The first player, we will suppose, plays the Beetle given above, which ranks 52 under Skeleton.

The second player plays the Kingfisher, rank 96: The third plays the Sea-horse, rank 98:

VERTEBRATA.

*PISCES.* TELEOSTEI. (*M.*)
(perfect boned.)

7. LOPHOBRANCHII. (*M.E.*)
(tufted gilled.)

**Sea Horse.** *Hippocampus brevirostris.*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| (67) | (55) | (57) | (40) | (44) | (61) | (55) | (43) | (65) | (59) | (85) |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| (55) | (20) | (56) | (31) | (48) | (62) | (98) | (85) | (59) | (47) | (55) |

And the fourth plays the Snapping Turtle, rank 102, and wins:

VERTEBRATA.

*REPTILIA.* CHELONIA. (*Br.*)
(turtles.)

6. CHELYDROIDA.
(amphibious turtles.)

**Snapping Turtle.**
*Chelydra serpentina.*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| (24) | (96) | (71) | (43) | (71) | (78) | (82) | (73) | (40) | (71) | (32) |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| (66) | (28) | (68) | (63) | (71) | (77) | (102) | (95) | (86) | (52) | (84) |

After they have become somewhat familiar with this game, it will be time to give them definitions of the terms, and to ask them about the relative rank of the animals and why they rank so.

Interest in the game will give them interest in the subject, and it will take a very poor teacher to prevent them learning many important things of their own accord about *circulation*, *digestion*, *respiration*, etc.

Any teacher, whether he understands Zoölogy or not, may use this method successfully if he will follow this plan substantially as outlined, and consult the Guide Book which accompanies the games, for information.

* Zoologic Whist and Zoonomia. Double packs. Vertebrates and Invertebrates. Fifty two cards each, representing the orders of the animal kingdom By Hyland C. Kirk. Price $1.00. McLoughlin Bros., 71 & 73 Duane St., N. Y.

For the SCHOOL JOURNAL.

### *ARITHMETICAL HEALTH-LIFTING.*

BY REV. S. W. POWELL, Brooklyn, N. Y.

No. III.

The distinction between odd and even numbers would also be noticed as the class went on, because it would be seen that some could, and some could not, be divided into two equal parts. As the numbers grow larger the variety of combinations would increase, and—within certain limits—the interest would increase in proportion. The attempt to find out whether another knows as much as one's self, and whether if he does, he can tell it as readily, makes a constantly fresh source of diversion, and the greater the number of such facts the greater is the range of interest. But of course brevity in the exercises is the only condition on which, in the case of young scholars, this interest can be maintained.

After awhile the numbers can be arranged on slips of paper in the following order:

| Odd. | | | Even. | | |
|---|---|---|---|---|---|
| 1, | 3, | 5, | 2, | 4, | 6, |
| 7, | 9, | 11, | 8, | 10, | 12, |
| 13, | 15, | 17, | 14, | 16, | 18, |
| 19 | | | 20 | | |

Of course this was not done all at once, but by adding the numbers to the table in the above order as fast as they were attacked. Each scholar might make one for himself with lead pencil after prastising on his slate till he could do it well, adding the numbers from time to time as they were learned.

Hanging somewhere in sight should be a large card of Manilla paper or some stiff material upon which the teacher, or some expert older scholar, should from time to time add the new figures in a bold, neat character.

This arrangment of the numbers for drill in order to fix what is already ascertained by experiment, has several advantages.

(1). It separates odd from even numbers to the eye.

(2). It provides skips for drill. By going down or up the columns skips of *six*, and by going across them skips of *two* are made. This makes breaks so that one can't guess at the correct answer from the one last given as would be the case were the numbers taken in their serial order. E.g., Suppose we are dealing with 11, you might ask "11= 1 and what?" Jimmy says "10." Then if you take 2 next and say "2 and what?" it is easy for little Joe to conclude that it is 2 and 9, or one less than the 10 of Jimmy's answer. But if going down the column you say "7 and what?" it is too far a step from the "10 and what?" and Joe must think to make the right answer. Of course there must be a good deal of work done in the serial order at first, but the thing is not pegged fast in the memory until everything can be given without hesitation in *broken* order.

(3) Any broken order should yet be systematic, so that each number shall have an equal amount of attention, and by going through the whole card, either up or down or crosswise this result is reached.

In the case of these little ones all this was not called arithmetic, nor was it regarded as a task, but a game. But by it certain essentials that are too commonly left out of sight were secured. For one thing, the fundamental idea of the unit was fixed so thoroughly that it could not but stay and grow.

This idea is that of a measure, like a yard stick or a pint cup. If you measure the distance from the school-house door to the front fence with a yard stick, you have to lay it down only once for every three times that you would lay down a foot rule. If you dip up a pail of water from the spring with a pint cup, you must fill it twice as often as you would a quart measure.

When 10 was reached, and so on for all the numbers up to 20, came the idea of groups of ten, with the figure showing how many of them were used, standing in the second place. After reaching 20 it would be easy to carry on the notion to 30, 40, and so on to 100, or ten tens. The term did not last

long enough to carry it above 20 without slighting something. That slighting would have caused fogginess, and it is only as our ideas are *clear* that they are interesting.

For review work, (which constituted a large part of the whole after 10 was reached), the card was used as much as possible. E g., If the numbers were 13, some one would point to 1 and say, "13 is 1-? 7-? 13-? 3-?" whoever was answering would fill the blank with the complementary number. Or if the work was factoral the one who was pointing would say, (laying the pointer on 1, 7, 13, 3, etc., successively): "In 13 there are - ones;—seven and—; —13;—threes and—; the blank being filled by whoever was answering. Or one of the scholars might take the pointer and say the whole until some hand was raised for a mistake.

Notice that great care was taken not to say "13 is 1 *and* 12, 7 *and* 6, 13 *and* 0, 3 *and* 10," but with the "*and*" *left out* so as to accustom them to think of the complementary number as necessarily a part of the 13 if the other part was mentioned. Just as when you see a man going through a door with only his foot left in sight behind him, you see all the rest of him in your mind's eye as *one whole*. A child has in his mind a series of pictures of all the objects he knows well—his kitten, his father's horse, the house he lives in, and most of the things in it, as well as the different persons he sees every day. If he saw the kitten's paw or nose projecting from behind a box, there would at once come up to him a picture of the whole kitten. It is a very important point when dealing with numbers, to bring this picture-forming power of the mind into use so invariably that it shall become a habit.

For the SCHOOL JOURNAL.

## PHYSICAL TRAINING.—I.

As practiced in the Jamaica (N. Y.) Public Schools, Supt. N. J Ballard, Principal.

(EDITORIALLY REPORTED.)

Having heard that systematic and thorough work in physical training is done in the Jamaica public school, we paid that school a visit last June to see what was done and how it was done. Having stated the object of our visit to the Principal, he cheerfully made arrangements to change the order of recitations so that the classes could exercise at once, with the understanding, however, that the regular drill should be given just as it is given at every regular lesson.

The room fitted up as a gymnasium is about 30x40, with three large windows at each end, and rolling doors along one side, thus affording ample means for ventilation.

The apparatus is simple—constructed with a view more to strength than beauty—and consists principally of a long horizontal ladder, inclined ladder and plank, horizontal parallel swinging and vertical bars, vaulting horse, rowing machines, pulley weights, pulling and knotted ropes, besides plenty of Indian clubs, dumb bells, and wands—the last three so arranged on the walls that pupils can select the proper sizes as they march by. The stationary apparatus is so arranged that the floor can be cleared almost instantly for marching or free gymnastics. Round and square spots are painted on the floor upon which the pupils stand during certain exercises.

The first class called was the class from the Intermediate department, about one hundred, composed of boys and girls from ten to fourteen. They marched in from opposite directions, in two single lines, each pupil taking a pair of dumb-bells of the proper size, and then marching to his or her place. They were allowed considerable liberty of conduct until the command, "Attention!" Every pupil at once took the military position—heels together, toes out, shoulders back, chest well out, chin in, arms straight by sides, body perfectly erect and steady, eyes front and kept there, both bells by the side, parallel and horizontal.

Then the class was inspected and all faults of position corrected,—one shoulder ordered to be raised a little, another lowered, bells straightened, position of feet corrected, &c. When everything was satisfactory, the next order was given *Right-face*. It was obeyed with military exactness and promptness. The positions were again corrected,—chins drawn in, or carried out, backs straightened when too much hollowed—a common fault. Then came two or three orders in quick succession, *Front-face*, *Right about-face*, *Right-face*, *Front-face*, *Rest*. Most of the time the instructor had kept up a running comment upon the appearance of pupils with regard to position and movement, his object evidently being to keep the class wide-awake and good natured. He never missed an opportunity to call out a good natured laugh.

The class was now ready to begin the regular drill, a set of exercises that is never omitted. Additional exercises are usually taken, but not until the regular drill has been taken. The exercises were given with organ accompaniment. We will describe them as nearly as possible.

*Attention—ready.* The exercise commenced.

1. Breathing. Arms carried slowly from side to vertical position over head, lungs at same time filled to utmost capacity. Arms brought slowly down to sides, lungs emptied. (4 times.)
2. Rising on toes, slowly, as high as possible, 16 times.
3. Rising on heels. (16 times)
4. 2 and 3 repeated.
5. Left toe placed behind right heel, then slowly sinking till right knee touched the floor 2 times.
6. Same with left.
7. Repeat 5 and 6.
8. Bells held vertically over head so that both balls of one touched both balls of the other, then brought forward and down till they touched the floor—*knees not bent*. (2 times.)
9. Same, but twisting body to right as bells were brought down. (2 times.)
10. Same to left.
11. 8 repeated.
12. With bells on hips, body bent slowly, forward and back. (4 times.)
13. Body bent slowly to right and left. (4 times.)
14. Body twisted vigorously to right and left. (4 times.)
15. 12, 13, 14 repeated.
16. Right and left shoulder raised, alternately, as high as possible.
17. Same, simultaneously.
18. 16 and 17 repeated.
19. With arms at side, right arm raised to horizontal position. (8 times)
20. Same with left
21. Same, but arms raised together in front.
22. Same, but arms thrown backwards and up as far as possible.
23. Bells brought from side to horizontal position at side. Forearm then bent at right angles to upper arm; without changing relative position of fore and upper arm, bells struck in front. (8 times.)
24. Twist bells with forearm. (8 times.)
25. 23 and 24 repeated.
26. Head bent slowly forward and back. (8 times.)
27. Head bent slowly to right and left. (8 times.)
28. Head twisted slowly from right to left. (8 times.)
29. 26, 27, 28 repeated.
30. With both bells in right hand, elbow close to side, bells brought to shoulder. (16 times.)
31. Bells pushed vigorously up from shoulder. (16 times.)
32. 30 with left.
33. 31 with left.
34. Bells at side twisted quickly and vigorously. (8 times.)
35. Same, horizontal at side. (8 times.)
36. Same, vertical. (8 times)
37. Same, horizontal in front. (8 times.)
38. Right leg swung across left, then right swung in circle as far back and around left as possible. (4 times.)
39. Repeated with left.
40. 37 and 38 repeated.
41. Short and quick step diagonally front with right and left alternately.
42. Same, back. (8 times.)
43. Short, quick to left with right foot, and to right with left foot, alternately. (8 times.)
44. Same, back. (8 times.)
45. Breathing exercise. (4 times.)

This closed the exercise with the bells, having taken about 8 minutes.

Pupils now fell into line, hung up their bells, then fell into line according to heights, boys and girls alternating.

Then came the command, *Position One*. Pupils marched perfectly erect, arms at side—rigid thumbs pointing out. *Two*. Hands on hips, fingers front. *Three*. Hands on hips, fingers back, elbows well forward. *Four*. Hands folded on head, elbows well back. *Five*. Arms vertical, tips of fingers touching. *Six*. Arms vertical, hands folded. *Seven*. Same, with palms upward. *Eight*. Hands folded back of head, elbows well back, head firmly pressed back against folded hands. *March*. Pupils marched in natural position. *March One*. Pupils marched on toes. *Two*. On heels. *Three*. Toes turned well out. *Four*. Toes turned well in. *Five*. Knees bent. *Six*. Springing step. *Seven* Ball of foot touching floor first. *Eight*. Quietly as possible.

Boys and girls then separated, marching in opposite directions around the room till the leaders met, then all faced toward platform, all standing at ease.

*(To be continued.)*

## READING CIRCLES.

From week to week we shall present such information as may be interesting to all who desire information concerning the Reading Circle movement. The last state to come into line is Wisconsin. It is their purpose, as stated in the report of the committee on organization, to assist teachers in the study of their profession and general self-culture. For this purpose it will recommend courses of study, prepare outlines of work, secure books to members at the lowest rates, and give information regarding educational publications.

Two courses of study are prescribed for the present year, an elementary and an advanced course.

As the purpose of study is not to pass an examination but to gain knowledge and culture, no provision will be made at present for examinations in the course. Each member of the circle will, however, be expected to report to the county manager on the 1st of January and of July, whether he has done the whole of the prescribed work faithfully, or what part of it he has done; and the record of the manager shall be kept in such a way as to show this clearly. These certificates will be forwarded to the secretary of the board of directors at the close of the year, and to those who have fully completed either course he will issue a statement, signed by the president and secretary of the board, to the effect that the bearer certifies to having carefully and critically pursued the elementary (or higher) course of study laid down by the State Reading Circle for the year.

The books of the Wisconsin Circle, as far as adopted, are, for the Elementary Course, Page's Theory and Practice of Teaching. Barnes' General History (Ancient), Martin's Human Body (Elementary.)

For the Advanced Course, Quick's Essays on Educational Reformers, Barnes' General History (completed), Wayland's Intellectual Philosophy.

HOW TO ORGANIZE. The most convenient opportunity for starting the movement is afforded by the teachers' institutes and teachers' examinations. Let the county manager explain at these places the purposes of the reading circles, distribute circulars of information, and proceed to enroll as members all who are ready to join. Where but one teacher from a neighborhood is present, let that one join and become the means of enlisting others. Wherever a local circle of four can be formed, let a secretary be chosen on the spot and the organization thus completed.

It will be seen that the plan of the Wisconsin Circle is radically different from the New York Circle in two particulars: (1) There is no examination, and (2) much of the course of reading is of a general nature. In this state the examinations are in writing, the reading is purely professional, and the diploma at the close gives its holder some valuable evidence of professional standing. It seems to us that a *teachers'* reading circle course should confine itself to works on teaching.

## TABLE TALK.

We have spoken several times concerning the formation of correspondence classes, and we are happy to announce that the ball is rolling. Three classes are already formed and others will be organised as fast as new names are received. The object of this movement is to assist teachers in the answering of questions. Many times a teacher is puzzled to know where he can find an answer to a question. Now if, under these circumstances, he had a few friends to whom he could send it and be certain of an answer within a week, he would be relieved of a great weight. It is for the purpose of helping such teachers that these classes are organized The rules of each class are the following, and it is essential that they be *strictly observed*.

1. Each question must be sent to all the members of the class to which the questioner belongs *and to us*.

2. Within one week after the question is received a reply *of some sort must be sent to each member and to us*.

3. All criticisms are to be sent to the member criticised *only*.

4. In case of any difference that cannot be arranged, reference can be made to us as umpire. We will refer the point to some competent person and answer in the JOURNAL, *which must end the discussion*.

Other rules may be necessary, these may be modified, but this is enough to put the plan in working order. The following questions have been sent to the classes to which they belong:

PRIMARY.

1. (a) What accounts for the "dry" and the "wet" seasons in the Tropics?

(b) If the trade-winds blow continually east, why are ot the seasons the same the year around?

(c) What is the cause of the Sahara, Arabian and Persian Deserts? W. L.

2. Is heat visible? If not, what do we see quivering above a heated stove or furnace? B. G.

INTERMEDIATE.

1. Parse words in italics:

(a) Who told you how *to parse what*?

(b) Woe *worth* the chase! woe worth the day!
That cost thy life, my gallant *gray!*

(c) It cannot be known to *one another*,

(d) The apple is not fit for the *child to eat*.

(e) "What are we," said the musing prince, "*that* we should fill the earth with ourselves—*we kings?*" A. R.

2. What is meant by "correction lines" in government surveys? M. S. N.

ADVANCED.

1. (a) How is the day changed in crossing the International Date Line? Why?

(b) When it is one o'clock, A. M., June 4, on longitude 165° west, what time is it on longitude 165° east?
W. C. W.

2. Give solution: A banker owns 2½% stocks at 10% below par, and 3% stocks at 15% below par. His income from the former is 66⅔% more than from the latter, and his investment in the latter is $11,400 less than in the former. Required, the whole investment and income.
W. E. M.

3. What is kauri gum, and for what is it used?
F. F. W.

The names of the members already enrolled are as follows:

CORRESPONDENCE CLASS.

PRIMARY DEPARTMENT.

| | |
|---|---|
| Frank Coover, | Reamstown, Pa. |
| John J. Fergurson, | Lick, W. Va. |
| Kate Keegan, | Danube, N. Y. |
| Clara L. Locke, | Lansing, Mich. |
| Joseph S. Palmer, | Andover, Conn. |
| Mrs. J. J. Davis, | Murphy, N. C. |
| H. G. Humber, | Fulton County, Pa. |
| Mary P. Hickey, | Waterford, Pa. |
| W. C. Roatan, | Nolanville, Texas. |
| P. N. Dwello, | Conover, Iowa. |
| Hattie Olive, | Prescott, Wis. |
| T. Cowan, | Cadillac, Mich. |
| Ella M. Mills, | Ridgebury, Ct. |
| Alida B. Clark, | Chester, Ct. |
| Miss A. M. Kennard, | Port Gibson, Miss. |

INTERMEDIATE DEPARTMENT.

| | |
|---|---|
| John Lavelle, | Lawrence, Kans. |
| M. D. Luckey, | Tiptonville, Tenn. |
| Grace Matthews, | Jackson, O. |
| Geo. E. Smith, | Walcott, Ia. |
| Wm. B. Vane, | Linkwood, Va. |
| Emily West, | Flint, Mich. |
| Herman Wildonger, | Ottsville, Pa. |
| W. J. Williams, | Chapin, Mich. |
| W. L. Williams, | Georgetown, Ia. |
| D. Seth Yodes, | Scalp Level, Pa. |
| J. H. Orcutt, | Odebolt, Iowa. |
| Joseph S. Palmer, | Andover, Conn. |
| John W. Jennett, | 341 Commerce St., San Antonio, Texas. |
| D. L. Irwin, | Isabelle, W. Va. |

ADVANCED DEPARTMENT.

| | |
|---|---|
| Belle Dunham, | Dunlap, Ia. |
| Samuel S. Fritz, | Fairmont Springs, Pa. |
| M. E. Griffin, | Kingston, Mo. |
| B. Robertson, | New Wilmington, Pa. |
| Joseph S. Palmer, | Andover, Conn. |
| J. C. Hunt, | Paris, Texas. |
| Chas. A. Mitchell, | Ozark, Mo. |

Answers to questions received are to be sent *within a week* to each member of the class *and to us*.

Any comment or criticism upon answers must be made within a week of their reception, and sent to each member of the class *and to us*.

* * *

The way to govern people is an interesting question for teachers, for there is not so great a difference between the government of old and young boys and girls as some may imagine. A witty anecdote illustrating this point, is going the rounds of the press. Here it is:

The other day, when old Major Solman announced his readiness to proceed in the direction of the church, his wife appeared wearing a "Mother Hubbard" dress. The old man intently regarded her for a few moments and asked: "Mary, what sort of a coat do you call that?" "It's a 'Mother Hubbard,' Jeems." "Are you going to wear it to church?" "Why, certainly, Jeems. The 'Mother Hubbard' is all the fashion now." "Well, I'm glad to hear it," the old man replied; "just wait until I get ready and we'll go." The old man went out into the kitchen, took a couple of meal sacks, cut the bottoms out, sewed the tops together and put them on in imitation of pantaloons. When he returned his wife uttered a loud cry of astonishment and exclaimed: "Great goodness, Jeems, what's that?" "Father Hubbard," the old man replied. "You're not a-goin' to wear them sacks, are you?" "I've got to be fashionable to keep up with you. I've got just as much right to wear these meal bags as you have to go in that bran-sack." "I'll take it off." "All right; off goes Father Hubbard," and turning away he added to himself: "Only one way to beat a woman, and that's by agreein' with her. If it hadn't been for the Daddy Hubbard I'd been in a mighty bad fix."

## FOR THE SCHOLARS.

### *AUTHOR'S DAYS.*

EDGAR ALLAN POE.

Born Jan. 19, 1809. Died Oct. 7, 1849.

THE CITY IN THE SEA.

Lo! Death has reared himself a throne
In a strange city, lying alone
Far down within the dim West,
Where the good and the bad and the worst and the best
Have gone to their eternal rest.
There shrines and palaces and towers
(Time-eaten towers that tremble not)
Resemble nothing that is ours,
Around, by lifting winds forgot,
Resignedly beneath the sky
The melancholy waters lie.

There open fanes and gaping graves
Yawn level with the luminous waves,
But not the riches there that lie
In each idol's diamond eye—
Not the gaily jeweled dead
Tempt the waters from their bed;
For no ripples curl, alas!
Along that wilderness of glass—
No swellings tell that winds may be
Upon some far-off, happier sea—
No heavings hint that winds have been
On seas less hideously serene.

DREAM-LAND.

Bottomless vales and boundless floods,
And chasms, and caves, and Titan woods,
With forms that no man can discover
For the dews that drip all over;
Mountains toppling evermore
Into seas without a shore;
Seas that restlessly aspire,
Surging, unto skies of fire;
Lakes that endlessly outspread
Their lone waters—lone and dead—
Their still waters—still and chilly
With the snows of lolling lily.
For the heart whose woes are legion
'Tis a peaceful, soothing region—
For the spirit that walks in shadow
'Tis—oh 'tis an Eldorado!
But the traveller, travelling through it,
May not—dare not openly view it;
Never its mysteries are exposed
To the weak human eye unclosed;
So wills its king, who hath forbid
The uplifting of the fringed lid;
And thus the sad Soul that here passes
Beholds it but through darkened glasses.

ELDORADO.

Gaily bedight,
A gallant knight
In sunshine and in shadow,
Had journeyed long,
Singing a song,
In search of Eldorado.

But he grew old—
This knight so bold—
And o'er his heart a shadow
Fell as he found
No spot of ground
That looked like Eldorado.

And as his strength
Failed him at length,
He met a pilgrim shadow.
"Shadow," said he,
"Where can it be—
This land of Eldorado?"

"Over the mountains
Of the moon,
Down the Valley of the Shadow,
Ride, boldly ride,"
The shade replied,—
"If you seek for Eldorado!"

ISRAFEL.

In Heaven a spirit doth dwell,
"Whose heart-strings are a lute;"
None sing so wildly well
As the angel Israfel,
And the giddy stars (so legends tell),
Ceasing their hymns, attend the spell
Of his voice, all mute.

* * * * *

Yes, Heaven is thine; but this
Is a world of sweets and sours;
Our flowers are merely—flowers,
And the shadow of thy perfect bliss
Is the sunshine of ours!

If I could dwell
Where Israfel
Hath dwelt, and he where I,
He might not sing so wildly well
A mortal melody,
While a bolder note than this might swell
From my lyre within the sky.

GOLDEN THOUGHTS.

Ah, broken is the golden bowl! the spirit flown forever,
Let the bell toll!—a saintly soul floats on the Stygian river.

* * * * *

Come! let the burial rite be read—the funeral song be sung—
An anthem for the queenliest dead that ever died so young—
A dirge for her the doubly dead in that she died so young. —*From Lenore.*

At length—at length—after so many days
Of weary pilgrimage and burning thirst,
(Thirst for the springs of love that in thee lie,)
I kneel, an altered and an humble man,
Amid thy shadows, and so drink within
My very soul thy grandeur, gloom, and glory!
—*From the Coliseum.*

Then methought the air grew denser
Perfumed from an unseen censer
Swing by seraphim, whose footfalls tinkled on the tufted floor. —*From the Raven.*

Too much horrified to speak.
They can only shriek, shriek,
Out of tune,
In a clamorous appealing to the mercy of the fire,
In a mad expostulation with the deaf and frantic fire,
Leaping higher, higher, higher,

With a desperate desire,
And a resolute endeavor,
Now—now to sit, or never,
By the side of the pale-faced moon.

—*From the Bells.*

THE STORY OF POE'S UNHAPPY LIFE.

When Poe was a boy, he had no father or mother to go to when he was in trouble. They both died when he was very young, and Mr. Allan, a wealthy man, who liked Poe because he was such a bright little fellow, adopted him. He gave the boy good clothes, fine toys, and everything that money could buy, but the little Edgar cared more about something else than he did for all these. He wanted somebody to love him as his mother would have done if she had lived. He longed for this more than most boys; so much that he used to go out where the dumb animals were, and pet and feed them, and imagine that they loved him in return for his kindness.

But he found some one at last that loved him. When he was yet quite a little boy, perhaps eight or nine years old, he went home with one of his schoolmates on a visit. The boy's mother met them at the door and was so kind to the orphan boy that he was almost wild with delight. He had an excellent visit, and afterwards he spent all the time he possibly could with this lady. He used to tell her all his troubles—and he had more than most boys have, because of his bad temper. This lady used to help him to control it, and if she had only lived he might have grown up to be a good man; but she died just when he needed her the most. He was nearly heart-broken when she died; he used to go and sit on her grave and mourn for hours at a time? He would go there nights, no matter how cold and stormy it was, and imagine the strangest things about her. In the poem "Lenore" he speaks of her soul afloat on some mysterious river. The whole poem is about her; he wrote it soon after she died, but called it by another name. It always seemed to be a favorite poem of his, for he spent much time re-writing and improving it, and at last it was published under its present name, "Lenore." The same name he uses in the "Raven"—

"The rare and radiant maiden whom the angels
name Lenore."

Poe might have been a good man if he had learned to control himself. He had great talent, but it brought him little good, and he was very unhappy all his life. He seemed to try hard enough to have good times, for he drank and gambled and did almost everything that was bad, but he found out when it was too late that these were not the things to bring him happiness. The night before he died he spent nearly the whole night drinking and carousing, and the next morning he was found in the streets nearly dead with delirium tremens. He was taken to a hospital, but only lived a few hours.

SUGGESTIONS TO THE TEACHER.

[In addition to the selections here given let "The Raven," "The Bells," and "Annabel Lee" be studied. It would be well for the teacher to procure some of Poe's prose works, and have some of his best short stories read,—"The Gold Bug," "The Hall of the House of Usher" or "A Descent into the Maelstrom." After finishing the selections, or enough of them to produce sufficient interest in the author, the teacher may read or relate the story of his life and have the pupils reproduce it as a written exercise.—EDS.]

## *READ THESE TO YOUR SCHOOL!*

I.

I stood in the store the other day when a boy came in and applied for a situation.

"Can you write a good hand?" was asked.

"Yaas."

"Good at figures?"

"Yaas."

"That will do—I do not want you," said the merchant.

"But," I said, when the boy had gone, "I know that lad to be an honest, industrious boy. Why don't you give him a chance?"

"Because he hasn't learned to say 'Yes, sir,' and 'No, sir.' If he answers me as he did when applying for a situation, how will he answer customers after being here a month?"

II.

Oh, yes, my son, a good name is more to be desired than great riches, because it insures the riches. So long as your name is good, your paper is bankable without any other man's endorsement. But it takes a gilt-edged signature to be good in the eyes of the cashier in these days, my boy. And remember that a "fair to middling" name isn't good; not by a long shot. And a "tolerably good" name isn't good, any more than a "tolerably good" egg is good. The "good name" the wise man meant is just simply a plain, unqualified, simple Good, but it's Good with a big G, son, and don't you forget it.

## *LIVE ANSWERS.*

1. William R. King, Senator from Alabama, and Vice President under Pierce, was called "Miss Nancy" by his brother Senators on account of the fastidiousness of his dress. Senator William Allen, on account of his loud voice, gained the title of "The Ohio Gong."

2. The fibre of the hop vine is said by some French paper manufacturers to be the best substitute for rags yet discovered. Its advantages are great length of fibre, strength, flexibility, and delicacy.

3. Cocain is a substance obtained from coca leaves. It deadens the action of the nerves, producing temporary insensibility. It has been used as a cure for the morphia habit and for alcoholism. It is also used by dentists to deaden the nerves of a tooth that is to be operated upon.

4. Pain performs the office of a sentinel to our bodies. It tells us to stop when we are doing something that will injure any of the parts. When a bone is broken or a muscle strained, the pain that follows any movement of the injured part, obliges us to keep quite until it has had time to heal.

5. Hans Duringer, who made the great clock at Dantzic, was asked by the people of Hamburg to make one like it for their city. He consented, but the citizens of Dantzic were not willing that any other town should possess a clock equal to theirs, so when they failed to persuade Duringer to give up making one for the Hamburgians, they put out his eyes. Soon after this he found his way to the great clock, and with a pair of scissors he cut one of the wires. The clock immediately stopped and no one has been found able to set it in motion again.

6. Pocahontas on her visit to England, as the wife of John Rolfe, was called "The Lady Rebecca."

## *LIVE QUESTIONS.*

"Act in the living present."

The things of to-day are interesting; the past is dead; to-morrow has not come!

1. What is the name of the place where General Grant is buried?

2. Who is the most eloquent statesman in our country?

3. How many states as large as Rhode Island would Dakota make?

4. Where does the water supplying Brooklyn, N. Y., come from?

5. What canal is Chicago anxious to have built?

6. Which is nearer the centre of the earth, the bottom of Lake Michigan or Lake Ontario?

## *NEWS OF THE WEEK.*

The much talked of yacht race which is to decide whether America is still to hold the champion cup for yacht speed, or hand it over to England, was to have taken place last week, and several attempts were made, but accident and unfavorable weather prevented anything like a fair test until Monday the 14th, when, under the most favorable circumstances for both vessels, the "Puritan" came out sixteen minutes ahead of the English "Genesta." There are to be several tests, however, before the question is fully decided. The English yachtmen will not admit that they are beaten, while the Americans are by no means ready to "give up the cup."

Prince Bismarck has laid himself open to the charge of injustice by issuing orders for the expulsion of the Poles from Prussia. The police are now carrying out the injunction by compelling the people to leave the homes they have made for themselves upon Prussian soil. Austria shows her sympathy with the exiles, and her disapproval of Bismarck's action by raising subscriptions for them.

Riel's prospects for pardon appear very slim. The full court of Manitoba have confirmed the sentence of death, and it is thought that he will be hanged on the 18th. Exciting meetings are still held in his behalf, and the life of the judge who sentenced him has been threatened.

A wonderful star in the great nebula of Andromeda has been discovered. Its light is growing brighter daily, and can be easily seen with the naked eye. Astronomers consider it as one of the most remarkable phenomena in the history of astronomy.

The Emperor William, of Germany, has written a letter to King Alphonso, of Spain, saying that he has no intention of doing anything that will injure his old friend Alphonso; that he will withdraw from Yap and give up all claim to any of the Caroline Islands, provided Spain will establish her government there and make it effective. It is said that for once the emperor has gone contrary to his great chancellor, for Prince Bismarck is very unwilling to give up the Carolines.

## EDUCATIONAL NOTES.

*Contributions of news and notes are solicited from our readers. Those that state the thoughts expressed at different meetings are more valuable than those that contain only names and dates.*

FOREIGN.

Some considerable time since, the Japanese Government constituted a mixed commission of native and European scholars, with the object of finding the way of expressing the immense amount of Japanese written symbols in European letters, and of fixing rules for spelling Japanese words in our alphabet. They have so far succeeded that they have compiled a Japanese dictionary, in which all the Japanese words are printed in Roman characters. Whatever otherwise may be the value of this work, it ought to lighten the labor of making a first acquaintance with this language.

Mr. Leonard Courtney, M.P., in distributing the prizes to the female pupils of Trion House, Liskeard, referred to it as a matter of great satisfaction that there had recently been a decided advance in public opinion on the question of the education of girls. Hitherto girls had not received the same care and attention in their education as boys had done, and there seemed to have been a widespread opinion that girls might be neglected. They had the shameful spectacle, too, of benevolent men and women leaving large sums of money for the equal education of boys and girls, and yet these vast sums had been devoted to the education of boys, while girls had been almost entirely neglected.

CONNECTICUT.

School building has been active, and it is encouraging to note the disposition to erect substantial and tasteful structures. Seymour has completed a ten-room brick building at a cost of $30,000. Shelton will soon build a similar one, costing a little less. Stratford has just dedicated with pleasant ceremonies a fine building. New Haven will add another to its number of well-built houses, in all of which especial care to ventilation and heat has been exercised. Meriden is building a $75,000 high school. The Norwich Free Academy has opened its year with a large corps of instructors and two hundred and twenty-five pupils. Much is expected of the new principal, Prof. Keep.

The New Haven schools open with over eleven thousand pupils, an increase of five hundred over last year.

B. B. Seely, Superintendent of Schools of Vicksburg, Miss., after a careful study of the New Haven schools, adopted the system with success. This year he hoped to bring several teachers with him on another visit, but was obliged to abandon with regret that part of his plan.

IOWA.

The Ida County Normal Institute, conducted by Prof. F. B. Gault, of Pueblo, assisted by Prof. Chevalier, of Ames, Iowa, and Miss Marion Mattocks, of Des Moines, has just closed a very successful two weeks' session. One hundred and thirty-five teachers enrolled, a very gratifying result to County Superintendent Mrs. A. H. Smith, who had taken great pains to make the normal a success. At the close of the Institute the teachers presented Mrs. Smith with a silver ice pitcher, as a token of their esteem and appreciation of her efficient work during her four years' service as County Superintendent. D. T. F.

MASSACHUSETTS.

The forty-sixth year of the State Normal School at Bridgewater, Mass., opened Wednesday, Sept. 9, with an entering class of seventy, twenty-two of whom were young men. Of this class all but five are from high schools and academies. Several college graduates enter for the special course in the theory and art of teaching. The Chilian Government has sent two young men to this country to be educated for the profession of teaching, and the selection of the Bridgewater school is the result of a recent visit by the Chilian ambassador.

There have been three changes in the Faculty, Miss E. H. Hutchinson, a former graduate, and at the head of the department of language and literature in the State Normal College of Nashville, Tenn., has been appointed to a similar position in this school. Mr. F. W. Kendall, of the class of '85, has been appointed instructor in the industrial laboratory, and assistant in the department of natural science. Miss Carrie Wing, a former graduate and recently principal of a large primary school in New Bedford, is at the head of the "school of observation."

Large additions have been made during the summer to the biological cabinets by members of the "Science Club," which is connected with the institution. With the largest number ever in attendance and a full corps of experienced and enthusiastic teachers, a successful year is anticipated.

NEW YORK.

The Teachers' Institute last week at Watertown, under the charge of John H. French, LL.D., and Eugene Bouton, Ph.D., was a great success. More than four hundred teachers were enrolled.

Miss Sarah Van Petten has been appointed a member of the Faculty of the Oswego State Normal School, and Prof. Clarence Boutelle of Minnesota has been elected Professor of Mathematics.

The Potsdam State Normal School, Dr. E. H. Cook, Principal, opens with 365 pupils in the normal department, thirty-five more than there are seats for in the chapel. This is much the largest number at the opening of the Fall term in the history of the school.

The registration at the opening of the Fredonia State Normal School, Dr. Palmer, Principal, is four hundred in all departments. Miss Georgiana Dewey has been added to the Faculty as teacher of vocal music and reading. Nearly all of the last graduating class have secured positions as teachers. Great improvements have been made in the dormitory. The papering and decorations of the halls, and the arrangements for thorough heating and ventilation, with the water service provided last year, make it a model place for student boarding. Mrs. Scott continues in charge of the dining-room below, and the expenses will be brought down to about $3 per week, including fuel, lights, washing, and incidentals. Young gentlemen have now the privilege of taking their meals with the club, but must have their rooms outside the building. Dr. Palmer has the system thoroughly perfected. The opportunity offered to

those who desire a thorough education or professional training, with expenses reduced to a minimum, is superior.

The schools of Rochester are filled to overflowing this fall. In several districts it has been necessary to rent rooms to supplement the school buildings. A new schoolhouse—a model in its way—is nearly completed. When it is, there will be thirty schools in Rochester. About 350 pupils entered the Free Academy. Supt. Ellis thinks the work of last year was the best ever done in the schools there. The order of numbering the grades is to be changed this year. Heretofore the highest was the first grade, now the children of the first year in school constitute the first grade.

Prof. F. E. Welles entered upon his duties as Principal of the Advanced School, Utica, Sept. 7. The school never opened under more favorable circumstances, and from a long acquaintance with Prof. Welles, both in and out of the class-room, we predict a year of improvement. We congratulate Utica on having secured Prof. W.'s services.

NEW HAMPSHIRE.

The Fall term at Dartmouth College opened with a freshman class of 108—academic 77, scientific 15, agricultural college 18. The president of the college has forbidden the sophmore class from engaging in any sort of rush upon the penalty of immediate and unconditional expulsion. Cane rushing has been done away with by action of the sophmores last spring in voting not to molest the freshmen if they appeared with canes. Foot-ball rushing has the additional objection that much private property is destroyed on these occasions, and doubtless this is why the president has taken such decided action. Artz, the Dartmouth catcher, was expelled from college, Sept. 8, for engaging in a rush. He was suspended last spring for a similar offence, and had only been reinstated a few days. He has since been restored to his standing, his classmates pledging themselves not to engage in rushes or any of the questionable college pranks during the rest of their course.

New Hampshire Conference Seminary, at Tilton, opened with about 100 students. The Faculty has changed from that of previous years. Rev. D. C. Knowles is president, Prof. Williams takes Prof. Craigs's place as teacher of Greek and Latin, and H. D. Young takes the chair of Prof. Augsburg as teacher of art. Miss F. May Wells has been promoted to preceptress, and Prof. Bailey as preceptor.

G. W. Patterson, of Lancaster, son of Hon. James W. Patterson, State Superintendent of Instruction, was married, Sept. 1, to Miss Lilla O. Davidson, of Newtownville, Mass., formerly teacher of Latin in Concord High School.

H. W. Kittredge, principal of Dover High School, was married during vacation to Miss Marion M. Thacher, of Brandon, Vt.

The Nashua Board of Education have voted to employ a special teacher of drawing at a salary of $1,000.

Phillips Exeter Academy opened for the year on Wednesday, Sept. 9, with the largest number of students for several years. The gynasium, work on which has already been begun, will be of brick, 100 by 60 feet, and will cost $20,000. It is to be completed by November.

NEW JERSEY.

The schools of Newark opened Monday the 4th. The school buildings here all had a thorough overhauling, and are now in excellent condition. At no time in the history of the schools has there been brighter prospects for their uniform progress.

Prof. Baxter Merwin, for many years teacher of languages in the High School, has resigned. Prof. Mathews, formerly of Simpson's College, Iowa, is to take his place.

Miss M. L. Vreeland, teacher of methods in the City Training School, has been promoted to the Vice-Principalship of the same school.

Principals Hovey, Taylor, Smith, Collard, Day, Clark, Shepard, and Giffin were at Saratoga during the National Convention.

At the last meeting of the Board of Education it was decided to build a new school building of sixteen rooms in the Thirteenth Ward. The Thirteenth now has two of the largest schools in the city. There are thirty-four school buildings in the city under the charge of twenty-seven principals.

Supt. Wm. N. Barringer delivered an address at the opening of the Packard's Business College, New York. His subject was the "Influence of Education on Business." Those who heard his address speak of it in the highest terms.

OHIO.

The Cleveland City Teachers' Institute opened on Sept. 7, and continued three days. Dr. E. E. White, of Cincinnati, assisted Superintendent Ainsdale, the supervisors and special teachers. He gave a course of lectures on psychology, and one on pedagogy as growing out of psychology. These courses were admirable in conception and delivery, and were received with much favor. Dr. White's closing lecture was on "The Seven Elements of Power in School Government," and was a most admirable discourse. The superintendent and his assistants, leaving the philosophy of education mainly to Dr. White, confined their instruction mainly to practical points.

On the 10th the schools opened. The following is the organization of the corps of instruction and discipline: Superintendent, four supervisors, three special teachers, four training school teachers, thirty-four high school principals and teachers, 540 grammar and primary principals and teachers. The interest and enthusiasm of the corps at the institute were all that could be desired, and they foreshadowed a most successful year's work. B. U. H.

PENNSYLVANIA.

Miss Abbie Low, Supervisor of Primary Instruction, and Mrs. Susan Fean, special teacher of music, attended the Summer School of Methods at Saratoga. They consider their time there well spent.

Misses Taylor and Thorpe, teachers of successful experience of the North East Schools, have been called to the Erie Schools.

The Huntingdon County examinations for teachers closed Sept. 5. About fifty applicants out of three hundred examined, failed to pass.

Prof. Bell, ex-Superintendent of Mifflin County, has been made Principal of the Mt. Union schools. Prof. Jas. W. Elliott was elected to the Principalship at Orbisonia. Mr. C. H. Corbin goes to Alexandria, and Mr. A. H. Evans to Reedsville, Pa. The Superintendent, Prof. M. G. Brumbaugh, is progressive and practical. Good work is anticipated for the ensuing term.

Prof. L. S. Shimmell has been re-elected Principal of the Huntingdon Borough Schools, which opened Sept. 7.

Prof. H. C. Missimer, for a long time connected with the High School as Principal, had his salary raised to $2,000.

An effort is to be made in Philadelphia to do away with the Board of Education and return to the old district system, but it is not probable that public sentiment will allow such a change.

## PERSONAL.

SUPT. EDSON, of Jersey City, was born in Montello, the county seat of Marquette County, Wisconsin, in 1851, where he remained till he was twelve years of age. In 1863 he moved with his family to Vermont. In 1870 he graduated from the Randolph (Vt.) State Normal School, and in 1878 the degree of A.B. was conferred upon him. In 1881 Dartmouth conferred the honorary degree of A.M. upon the professor. The first year after leaving college he assumed the principalship of the High School at West Randolph, Vermont. For three or four years Mr. Edson taught in the public schools of Vermont and Illinois, and from 1879 to 1884 he was principal of the State Normal School at Randolph, Vt. During the past year Professor Edson was Superintendent of schools at Attleboro, Mass. While at the latter place he had special occasion to study the public school systems of Eastern Massachusetts. Last June Mr. Edson conducted a teachers' institute at Seattle, Washington Territory, for several weeks.

ADDISON B. POLAND, who has recently been made Principal of the Jersey City High School, comes from the Principalship of the High School at Ilion, N. Y. He is about 35 years of age and married. He is a graduate of the Wesleyan University, Middletown, Conn. He began his career by taking charge of the grammar school at Wurchenden, Mass., leaving to assume the Principalship of the Ashburnham (Mass.) High School. From there he went to Salisbury and thence to Fitchburg, Mass. In 1874 he secured the Principalship of the Ilion School, where he has since remained. Among the many firms and citizens of Ilion who speak in high terms of his personal merit are Remington & Son, of rifle making fame, clergymen, physicians, and others. His school work is backed up by many professionals, among his testimonials being a flattering letter from President S. L. Caldwell, of Vassar College.

CHARLES S. HASKELL, who succeeds Mr. Sheppard, as Professor of Greek and Latin in the Jersey City High School, was born at Auburn, Maine, in 1856; he received his early education at the grammar and high schools in that place, and later, in 1881, graduated with honors at Bates's College, at Lewiston, Me. Before taking his course at college—in the season of 1877 and 1878—he had charge of the High School at Lewiston, Me. After leaving college, in 1881, he was for a year principal of the Lebanon (Me.) Academy; he has been principal of the grammar school, at Weymouth, Mass.

MR. THOS. M. TAYLOR, President of the Board of Education of District No. 4, Mt. Vernon, Westchester County, has endeared himself to the teachers by his pre-eminent fairness to, and sympathy for, them in all their efforts. He is a trustee not only in name, but in fact, paying frequent visits to the three schools in his district, advising, counseling, and encouraging pupils and teachers. A thorough man of business himself, he performs all his duties as president on fair business principles and to the satisfaction of all with whom he is associated. The people will do well to retain him in the Board as long as he can be prevailed upon to remain.

MR. JAMES L. MORGAN, President of the Board of Trustees of district No. 5, is willing to make a personal sacrifice of time and means to serve the public and its interests in educational work. He is honest, active, popular, and efficient, and has visited the school under his charge so frequently, that he understands the merits and defects thereof as well as any one except the principal.

It will be most gratifying to the teachers of New York to know that DAVID WETMORE, ESQ., who was so badly hurt by being run over in the streets of this city a few months ago, has so far recovered as to be able to resume his duties as chairman of the Teachers' Committee. It is doubtful if he will ever be quite well again. He is almost the senior member of the Board, having been appointed by Mayor Havemeyer in 1871. He has vast business interests to superintend, but never neglects his official duties. He is affable and easily approached.

One of the most active members of the present New York Board of Education is the HON. GILBERT H. CRAWFORD, now serving his second term. He was born in this city, is a graduate of the New York College, and a lawyer by profession. His father is the Rev. Dr. M. D. C. Crawford, presiding elder in the Methodist Church; his father-in-law is the Rev. Stephen Merritt, the rich and philanthropic undertaker. Mr. Crawford, although comparatively young, has won marked success at the bar. He has a delightful summer residence in Nyack. He is an Episcopalian. His family consists of a wife and four children—two boys and two girls. He is a good debater, and is popularly known as "the teachers' friend." In the hands of such men the cause of popular education is secure.

WILBUR F. HUDSON, ESQ, the President of the New York Teachers' Association, is Principal of Grammar School No. 18, and clerk of the Nineteenth Ward Board of Trustees. Like Mr. Boyle, he is a great worker. He is a graduate of the New York City College.

B. D. L. SUTHERLAND, ESQ., who succeeded Mr. Francis J. Haggerty as President of the New York Teachers' Association, has been Principal of Grammar School No. 3 for more than a quarter of a century. His school has always been one of the largest and best in the city. It was a very famous school under his predecessor, the venerable Dr. Patterson. He, too, is clerk of his ward board. Mr. Sutherland impresses his personality upon all who come in contact with him. As President of the Teachers' Association for several years in succession, he proved himself an able speaker and a good parliamentarian.

WM. OLAND BOURNE, ESQ., assistant clerk of the Board of Education, is well known to the teachers of New York as a popular lecturer, but it is not generally known that he is a poet of no mean rank. Some of his verses which have found their way into the school readers, are perfect little gems, destined, no doubt, to live a long time. Some of his war lyrics, born of his stirring and romantic experiences in the Union Army, have a genuine ring and a fire about them.

## NEW YORK CITY.

During the summer all the school buildings in the city have been thoroughly overhauled and many improvements made. For this purpose about $90,000 has been expended, which includes considerable sanitary improvement. Thirty-three of the buildings have received repairs and painting, and new seats and desks have been supplied to many. No. 3, in the Ninth Ward, has received a new mineral case. In addition to the amount expended for these purposes, the sum of $41,077.50 has been paid out for new steam-heating apparatus and for repairs and alterations. The schools which have been newly supplied are Nos. 8, 11, 21, 23, 26, 31, 32 and 67. Alterations, repairs and changes have been made in the steam heating of Schools Nos. 9, 33, 34 and 75. Additions have been made to several of the buildings for the greater accommodation of pupils, it being estimated that the increased attendance will be between 4,000 and 5,000. The new buildings in process of erection are in a more or less completed condition. No. 89, at the corner of First Avenue and Seventieth Street, will be ready for occupation by the 14th. Another new building is on West Tenth Street, in the Ninth Ward; another at No. 43 First Street, in the Seventeenth Ward, and another on 112th Street, near Third Avenue, in the Twelfth Ward. They are expected to be completed before winter. The average daily attendance at the close of the spring term was 140,145 pupils, an increase of 3,195 over the year previous.

Is it in the power of any principal in this city to break down any subordinate teacher if he sees fit to do so? This is an important question. An influential female principal recently said: "If we don't want a teacher we will not have her. We pile the work on to her so hot and heavy that she gets sick and leaves, or else seeks a transfer. This is wrong, but a fact." Said another: "If a teacher is the least obstreperous we can squelch her by our examinations." Another boasted that she permitted a young lady to be appointed in her school on the distinct understanding that she was to "mash her up" at her first examination. Two old and faithful teachers of twenty-two years' standing have been driven out by slow persecution, to make room for younger faces. One died of a broken heart, and the other resigned.

JACOB T. BOYLE, ESQ., recently appointed to succeed Mr. Jared S. Babcock as principal of the Evening High School in this city, is Principal of Grammar School No. 75, one of the largest schools in this city. He is also clerk of the Tenth Ward Board of Trustees. As secretary of the Teachers' Life Assurance Association of this city for many years, his labors have been enormous. Having been associated with the Evening High School for a long time as Vice-Principal, he is the proper person to have the place. Acknowledged by all to be one of the foremost teachers in New York, he owes his success not only to his superior talents and attainments, but to his prodigious capacity for work.

The only thing that can possibly reconcile the teachers of New York to the loss of RUFUS G. BEARDSLEE, ESQ., from the Board of Education, is the fact that he has received an honorable appointment under that Board, which he has served for fifteen consecutive years with such unswerving fidelity.

Ever since it was organized Grammar School No. 69, in West Fifty-fourth Street, has been one of the most select and successful in the city. Its success in getting scholars into the colleges has been most remarkable. MATTHEW J. ELYAS, M.D., Principal of the Boys' Department, is also Principal of the famous senior evening school in West Fifty-second Street. He is a physician by education and came to New York from Buffalo, commencing his career as a teacher in the night schools. His preferment in the Twenty-second Ward has been rapid and brilliant. He married Miss Harkness, a teacher in the Normal College. He is fond of children and very domestic in his habits. His Vice-Principal, ALFRED T. SCHAUFFLER, ESQ., son of Rev. Dr. Schauffler, is one of the most eminent teachers in the city, having been a leading candidate for the position made vacant by the death of Dr. Schemm. He is a well-known vocalist, first and foremost in every good work connected with the schools.

MISS ANNIE M. HOFFMAN, Principal of the Female Department, belongs to a distinguished family of teachers. One sister is Principal of the Primary Department of Grammar School No. 33; and another is the highest lady teacher in Mr. John D. Robinson's celebrated boys' school in West Fifty-second Street. They occupy their own elegant brown-stone front in Fifty-first Street. Miss Annie was a leading teacher in Dr. Finch's school in West Fortieth Street when she was chosen by the trustees of the Twenty-second Ward to her present responsible charge. She is a teacher of intense energy and has a most thorough school. The strife for admission to this school is so great that they will soon require a new building.

MISS JULIA M. ELLIOTT, Principal of the Primary Department, is a quiet and ladylike teacher, long-known in the ward and respected by all. Her first assistant, Miss Julia R. Root, is a prominent member of St. Timothy's Church, and for several years a successful teacher in the Twenty-second Ward. This school has one of the finest locations in the city.

JARED S. BABCOCK, ESQ., who recently resigned the Principalship of the Evening High School to associate himself with the old and opulent publishing house of A. S. Barnes & Co., was formerly Principal of Grammar School No. 54 in the Twelfth Ward, and official reader to the Board of Education. He is the author of "Babcock's Speller," a book which has been a boon to the teachers of this city, and which is really one of the best "teachers' tools" extant. He has been influential in educational circles for years, and when Mr. Kiddle resigned, he was the most prominent candidate for his place.

HORSFORD'S ACID PHOSPHATE

FOR OVERWORKED PROFESSIONAL MEN.

Dr. CHAS. T. MITCHELL, Canandaigua, N. Y., says: "I think it a grand restorer of brain force or nervous energy."

## LETTERS.

The statement made in the JOURNAL, Aug. 23d, that the sides and the diagonal of a square are not necessarily incommensurable, or in other words, that the $\sqrt{2}$ can be expressed in finite terms by changing the denominator (I suppose he means the radix) from 10 to 17, I consider to be incorrect.

In order to show that there is no line, however short, that will be contained an exact number of times in the side and the diagonal of a square, I will produce the demonstration given in Loomis' Geometry, Book IV. prop. 35:

"Let A B C D be a square, and A C its diagonal; A C and A B have no common measure.

"In order to find the common measure, if there be one, we must apply C B to C A as often as it is contained in it. For this purpose, from the center C, with a radius C B, describe the semi-circle E B F. We perceive that C B is contained once in C A, with a remainder A E, which remainder must be compared with B C, or its equal A B.

"Now since the angle A B C is a right angle, A B is tangent to the circumference; and A E : AB :: A B : A F (Prop. 29, Cor. 1.) Instead, therefore, of comparing A E with A B, we may substitute the equal ratio of A B to A F. But A B is contained twice in A F, with a remainder A E, which must again be compared with A B. Instead, however, of comparing A E with A B, we may again employ the equal ratio of A B to A F. Hence at each operation we are obliged to compare A B with A F, which leaves a remainder A E; from which we see that the process will never terminate, and therefore there is no common measure between the diagonal and side of a square; that is, there is no line, however small, which is contained an exact number of times in each of them."

This demonstration is conducted on the same principle that we find the G. C. D. of two numbers, and that after every division there is always a remainder, no difference how small the side of the square may become, and at the moment the side of the square becomes a point or zero, the diagonal also becomes a point, but the instant before they came to a point there was the same ratio between the side and the diagonal as there was at the beginning.

If it were true, "By a change of notation from 10 to 17 will make every geometric ratio commensurable and expressible in finite numbers," then the "squaring of the circle," "the duplication of a cube," and the "trisection of an angle"—questions which have elicited the attention of all the great mathematicians since the days of Pythagoras and Archimedes—would also be expressible in finite numbers, which has been demonstrated, beyond the shadow of a doubt, to be as impossible to express them in finite numbers, as it is to have two hills without a hollow between them.

However, we would request the author to produce his demonstration, for none would be better pleased than the writer, if he can show by a change in notation, or otherwise, that there is no such thing as incommensurable lines. For it would throw a flood of light upon that host of integrals in the Calculus which have thus far baffled all efforts to integrate them; and thus render mathematics, in the strict sense of the word, an exact science. J. R. BALDWIN.

Blue Grass, Iowa.

*Reply to Mr. Baldwin.*—A very interesting review of Prof. J. R. Baldwin, in relation to geometric *commensurability* is courteously acknowledged. Loomis' demonstration, by which he assumes to prove something on *negative* ground, is not good mathematical logic. Geometry calls for demonstrable facts, and naught but what is based on *affirmative* ground admits of demonstration. When arguments, conducted on principles of the G. C. D. of two numbers, make squares reducible to points, logic changes to something else; and as to $\sqrt{2}$, there is no "square of two" in geometry, and hence there can be no root. The least numeric value which can be given to a geometric square is 4, the least root is 2, as the least numeric value of a geometric diameter is 1, and of a circumference $3+$.

The Prop. 35, Book IV, Loomis' geometry, would be unassailable if geometric lines were not divisible. Contrary to conventional lines, which receive their valuation from measured lengths, the geometric lines are valued by their *number of even parts* into which they are divided in order to be computible. The divisions of geometric lines must necessarily be changed when the *position*, the *form*, or the *magnitude* of *that* to which the lines *at the time* are related, changes.

When to the diagram (to Prop. 35, Loomis' geometry) is added the radius C H, perpendicular to the diameter E F, and the chord E H is drawn, then the side E H, of an inscribed square to the circle is given. The triangle C I E is evidently one-half an inscribed square to the square A B C D. Dividing the radius C B into 120 even parts and dividing the chord E H into 170 even parts, then, at the intersection I, the 85th division of the chord E H shall meet at right angle the 85th division of the radius C B, from the center C. Hence the following values and proportions: C H = 120. H I = 85. C B = 120. C I = 85. C E = 120. C K = 85. And, as radius C H: Sine H I:: Side C B of square A B C D: Side C I of square C I E K, and as Side C B: Side C: diagonal C E: Side C I.

What remains to be shown is, how, from the divisions given, a number of areal units can be constructed which will prove the two areas, C I E K and A B C D in the proportion of 1:2 (Euclid, 47th Prop.).

Multiply the two given sides, each by the number 288, then we obtain the following values:

$85\times288 = 24480$ — Side C I in common multiples.
$120\times288 = 34560$ — Side C B in common multiples.

To obtain the number of areal units for the root of the square C I E K, divide by 12. To obtain the number of areal units for the root of the square A B C D, divide by $16\frac{1}{9}$. Thus, we obtain: $24480 \div 12 = 2040$ — areal units in root; $34560 \div 16\frac{1}{9} = 2040$ — areal in root. $(2040)^2 = 4161600$ — number of areal units in either square. Proportional numeric areal value of the unit 12 in the side is 144. Proportional numeric areal value of the unit $16\frac{1}{9}$ in the side is 288. Hence, the square A B C D is equal in area to $4161600 \times 288 = 1198540800$, and the square C I E K is equal in area to $4161600 \times 144 = 599270400$. Thus, two ratios are proven. An areal ratio of 1:2; a lateral ratio of 17:24. CHAS. DE MEDICI.

## ANSWERS.

In my opinion the answer to Question 27, published in the JOURNAL June 6, is wrong. The question was:

"If, when I sell cloth for 8s. 9d. per yard, I gain 12 per cent.; what per cent. will be gained when it is sold for 10s. 6d. per yard?"

Now, it is self-evident that the answer is not correct, for since $8\frac{1}{4}$s. give only 12 per cent. gain, how could the difference between $8\frac{1}{4}$s. and $10\frac{1}{2}$s. (or $1\frac{3}{4}$s.) give the difference between 12 and 34, or 22 per cent? Your correspondent says the answer is 34+per cent. Take this simple statement by proportion:

105s. : 126s. : : 12 per cent. : (14$\frac{2}{7}$).

Hence the result is 14$\frac{2}{7}$ per cent. H. B.

No. The question is not one of proportion between the different prices of the goods, but a proportion of per cent. by increased gain—hence:

$100 : 12 :: 109 : 12\frac{9}{25}$

$105-12\frac{9}{25} = 92\frac{16}{25} = 7\frac{16}{25}$ shillings (first cost per yard).

$8\frac{1}{4}$s.$-7\frac{16}{25}$s.$= 1\frac{9}{100}$s. profit per yard.

$10\frac{1}{2}$s.$-7\frac{16}{25}$s.$= 2\frac{9}{50}$s. profit.

$1\frac{1}{2} : 2\frac{9}{50} :: 12 : 32$

∴ The proportion of per cent. is 12 : 32; an actual gain of 20 per cent. C. de M.

The above are both wrong. Take a simpler illustration: Suppose I sell goods at $5.60 per yard and thereby gain 12 per cent., what per cent. will I gain if I sell at $6 per yard?

First find the cost. $5.60 \div 1.12 = \$5$, cost per yard; selling at $6, I gain $1. One dollar is what per cent. of $5? $1.00 \div 5 = 20$ per cent.

Cloth sold at 8s. 9d. = 8.750 gives a gain of 12 per cent. First find the cost by dividing the selling price by 1 + the per cent of the gain. $8.75 \div 1.12 = 7.8125$s.

The same sold at 10s. 6d. = 10.5s. gives a gain 10.5—7.8125 = 2.6875s. gain. Gain divided by cost gives gain per cent $2.6875 \div 7.8125 = .34\frac{2}{5} = 34\frac{2}{5}$ per cent.

40. I measure off a piece of ground 100 rods in diameter; then fence it, and then take a horse and tether him with a rope fifty rods in length, to a post of the fence. On how much pasture can he graze? H. E.

Let A M B P denote the circular piece of ground. Diameter = 100 rds., the radius = 50 rds. Let P denote the post. The rope is 50 rds. = radius. With P as centre and radius = 50 rds. = length of rope, describe a second circle. The circumferences of the two circles will intersect at two points as A and B, then will the surface inclosed by the arcs A O B and A P B be the ground over which the horse can graze. Draw A P and P B. Since A P and P B are each radius of the second circle and chords of the first equal circle, they are sides of an inscribed hexagon, because each side = radius, and the arcs A P and P B are each the sixth part of the circumference; hence arcs A P B and A O B are each the third part of the circumference. A B is common chord of these arcs. From P draw P O perpendicular to A B. It bisects A B at D, and also bisects the arc A O B, and is itself bisected by the chord A B, hence P D is 25 rds. A P B O is a sector, whose arc is $\frac{1}{3}$ of the circumference of the circle. A B O is a segment, and is $\frac{1}{3}$ of the grazing area. Such figures can only be measured approximately. Circumference of the circle $= 3.1415926 \times 100 = 314.15926+$ rds. Arc A O B = $\frac{1}{3}$ of 314.15926 = 104.71975+ area of sector A P B O = $104.71975 \times 25 = 2617.99375+$ sq. rds. In the right angled triangle, A B D, we have $A D = \sqrt{2500-625} = 43.30127+$ rods; ∴ A B = 86.60254+ rds. area of the triangle A P B = $43.30127 \times 25 = 1082.53175+$ sq. rds. Area of segment = area of sector — area of triangle = $2617.99375-1082.53175 = 1535.462+$ sq. rds. In the grazing area there are two such segments. = 3070.924+ sq. rds. 3070.924+ sq. rds. ÷ 160 = 19.1932+ acres. D.

51. A bank by discounting a note at 6 per cent., gains a discount equal to 6 1-2 per cent. interest. How long was the note discounted before it became due? D. O. S

Let $x$—time.
" $100 represent face of note.
Then $100—6x—proceed at 6 per cent. bank dis.

$$\frac{100}{1+\frac{6\frac{1}{2}x}{100}}$$ —present worth at 6 1-2 per cent.

therefore $$100-6x = \frac{100}{1+\frac{6\frac{1}{2}x}{100}}$$

clearing $$100+\frac{39x^2}{100}-100 = \frac{39x^2}{100}-6\frac{1}{2}x$$

$$39x^2-50x$$

$x = 1\frac{11}{39}$ yrs.—1 yr., 103 days. B.

55. Please parse underscored words: "I want *to be quiet* and *to be let alone*." W. H. B.

In the sentence, "I want *to be quiet* and *to be let alone*," "to be quiet" is the direct object of "want"; "to be" has "quiet" for an attribute complement. For the infinitive and participle perform the functions of a verb and noun. "To be let alone" is the direct object of "want" understood; "to be let" is pres. infin. pass. and has "alone" for attr. compl. S. A. S.

56. Why do we dream? N. B. B.

Mahan, in his "Mental Philosophy," says: "In consequence of peculiar attitudes of the body, or states of the physical or mental system, certain feelings are awakened in the mind." S. A. S.

58. Why do we point off as many decimal places in the product as there are in both multiplicand and multiplier? W. H. B.

$(.5\times.4) = (\frac{5}{10}\times\frac{4}{10}) = \frac{20}{100}$ or .20, or .2, etc. In multiplying decimals we multiply both numerator and denominator, which being expressed by the decimal point, is found to contain as many decimal places as both numerator and denominator. S. A. S.

61. Why is "were" pluralized in the following: "This were a wicked pretension"? (Harvey's Grammar.) W. H. B.

To express the thought subjunctively; but this form of expresion is rapidly going out of use. D.

62. Who invented the multiplication table? W. H. B.

Pythagoras. D. W.

64. Please give the meaning of the following sentence found in Reed & Kellogg's "Higher Lessons in English":

"My having in Sanscrit, like
Orlando's beard, is a younger brother's revenue."
A. F. C.

The word "knowledge" can be used in the place of "having." Orlando's beard was *very* thin. In olden times the older brother received the greater share of the father's property. The sentence means, "I know but little about the Sanscrit language." F. V. I.

65. Can "perfect" be compared?

"Perfect," cannot be compared. D.

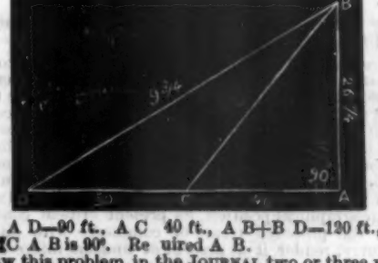
66. In the sentence, "I want books to read," would "books" or "books to read" be the object?

"Books" is the direct object of the verb "want," and "to read" is an adverbial element of purpose, modifying "want." It is equivalent to "I want books that I may read them." F. V. I.

## QUESTIONS.

74. (*a*) In how many minutes after 4 o'clock will the hour and minute hands be 5 minute spaces apart?

(*b*) In how many minutes after 4 o'clock will the hour and minute hands be at right angles to each other.




75. A D—90 ft., A C 40 ft., A B+B D—120 ft., an angle C A B is 90°. Required A B.

I saw this problem in the JOURNAL two or three year ago. I never saw the solution; have tried it at intervals, but now give it up. Would like a solution.

Stuyvesant, Columbia Co., N. Y. E. H. G.

76. A man bought a piece of land for $3000, agreeing to pay 7 per cent. interest, and to pay principal an interest in five equal annual installments; how much was the annual payment. M. T. J

## BOOK DEPARTMENT.

### NEW BOOKS.

A HISTORY OF THE PEOPLE OF THE UNITED STATES, FROM THE REVOLUTION TO THE CIVIL WAR. By John Bach McMaster. Volume II. New York: D. Appleton & Co.

This volume opens with the seventh chapter of the work, beginning with the settlement of Georgia, and includes seven chapters, ending with the discovery of the Columbia river by Robert Gray. The work is so exactly what the author set out to make it that one cannot get a better understanding of its scope than by reading the historian's own words. He says:

"The subject of my narrative is the history of the people of the United States of America from the close of the War for Independence down to the opening of the war between the States. In the course of this narrative much, indeed, must be written of wars, conspiracies, and rebellions; of Presidents, of Congresses, of embassies, of treaties, of the ambition of political leaders in the Senate-house, and of the rise of great parties in the nation. Yet the history of the people shall be the chief theme. At every stage of the splendid progress which separates the America of Washington and Adams from the America in which we live, it shall be my purpose to describe the dress, the occupations, the amusements, the literary canons of the times; to note the changes of manners and morals; to trace the growth of that humane spirit which abolished punishment for debt, which reformed the discipline of prisons and of jails, and which has, in our own time, destroyed slavery and lessened the miseries of the dumb brutes. Nor shall it be less my aim to recount the manifold improvements which, in a thousand ways, have multiplied the conveniences of life and ministered to the happiness of our race; to describe the rise and progress of that long series of mechanical inventions and discoveries which is now the admiration of the world, and our just pride and boast; to tell how, under the benign influence of liberty and peace, there sprang up, in the course of a single century, a prosperity unparalleled in the annals of human affairs; how, from a state of great poverty and feebleness, our country grew rapidly to one of opulence and power; how her agriculture and her manufactures flourished together; how, by a wise system of free education and a free press, knowledge was disseminated, and the arts and sciences advanced; how the ingenuity of her people became fruitful of wonders far more astonishing than any of which the alchemists had ever dreamed."

The originality of the author's idea, the immense amount of labor involved in the work; and the extraordinary value of the result—cannot fail to arrest the attention of every intelligent reader.

THE NEW GYMNASTICS FOR MEN, WOMEN, AND CHILDREN. By Dio Lewis, A.M., M.D. New York: Clarke Bros.

There are very few readers to whom the system of exercise in this book can be at the present time entirely new. So wide has been the book's popularity, and so practical its influence, that even those that never heard of it by name have come from imitation to put its system in practice. But although it has done wonders for the physical development of thousands, there yet remain thousands to be benefited. It is not a book that can grow out of fashion until health itself shall have become an antiquated style. The system provides for the judicious and proportionate exercise of every part of the body; and the numerous illustrations in the book go to make plainer, if possible, the descriptions of the text. Every teacher that makes any pretension to physical drill in school ought to have this book. Not only was it first in the field when originally published, but it has held its position ever since.

LIVES OF HON. GROVER CLEVELAND AND HON. THOMAS A. HENDRICKS. By Thomas W. Handford. Illustrated. Paper. Chicago and New York: Belford, Clarke & Co.

It may seem rather late to be receiving a last year's campaign document, but subsequent events have rendered this book something more. It is now a biography of one of our Presidents, and one that has justified up to date all the good things predicted of him in this book. It will perhaps at this time be more interesting than ever to refer to the previous record of the first man in the nation. It is the record, not of brilliant achievements, in the common acceptation of the term, but of sturdy, honest, phlegmatic persistence, which has proved its worth by success. It is a book worth reading.

DUE SOUTH. By M. M. Ballou. Boston: Houghton, Mifflin & Co. $1.50.

The author of "Due West" met with such encouragement as fairly justified him in writing the present volume, which consists of notes of a voyage to the tropics and a sojourn in Cuba. The book presents a comprehensive view of the island, and depicts with power the political and moral darkness which have so long enshrouded it. The author also gives a view of the interesting inhabitants and a glance at the beautiful flora and vegetation of the island. The great importance of its geographical position, its present critical condition, and the proposed treaty of commerce with our own country, render it at present of unusual interest in the eyes of the world, and particularly of Americans.

SHAKESPEARE'S TWELFTH NIGHT. Edited by W. Aldis Wright. Oxford, Eng. At the Clarendon Press: MacMillan & Co.

This is one of the Clarendon Press series of Shakespeare's plays. It is judiciously edited and accompanied by notes that occupy more than half of the volume, which is in very handy pocket form, well printed on good paper, and bound in strong, flexible cloth covers. Altogether it is one of the neatest and handiest of "Shakespeares."

O TENDER DOLORES. By the Duchess.

BARBARA HEATHCOTE'S TRIAL. By Rose Nouchette Carey.

THE LADY WITH THE RUBIES. Translated from the German of E. Marlitt. By Mrs. A. L. Wister.

Prices respectively, 50 cents, 50 cents, and $1.25, Philadelphia: J. B. Lippincott & Co.

The Duchess is hardly at her best in long stories; yet there is something quite irresistible in Dolores Lorne, the heroine of the tale. As for the circumstances surrounding her, the "web of mystery" is a very conventional affair, and was long ago worn threadbare. But the love-making, of which there is abundance, is altogether enjoyable. "All mankind loves a lover," and there are three lovers here, with all the stereotyped accompaniments of moods, frowns, bitter smiles, and tantalizing misunderstandings. Perhaps the most original character in the book is Mrs. Dovedale, who says the ugliest things with the most infantile grace imaginable.

The special "trial" of Barbara M. Heathcote seems to be that she is not as good-looking as the "rest of the family," and is consequently obliged to make up for it by being saucy and interesting, and the latter she certainly is. Her elder sister is a sweet, resigned young lady who has also had her trials, and bears them bravely. The brother Leigh is a handsome, easy-going young fellow, best described by his nickname "Gypsy." One of the very delightful personages of the story is Sir Geofrey Hunsden, a bluff, hearty, fox-hunting young baronet whom the reader cannot help liking, and who is pretty well liked by all the people of the story. The author undeniably has considerable power in the delineation of quiet home life and every-day people.

The Lady with the Rubies inhabits a dark room of a dark German castle, quite unbeknown to most of the family—being frequently taken by the children for a ghost, and occasionally terrifying the servants out of their wits. Just why this strange lady behaves in this strange fashion, our diligent search has failed to discover. It is a deep, dark secret of Herr somebody, whose schemes seem to be bitterly opposed by Frau somebody else. The lady is very beautiful; she is likewise the rightful heir to great possessions—or the mother of the rightful heir, or else his daughter. However this may be, does not matter; the heir turns up in due season, defeating all the wicked plots of his wicked relations. The hero is a fine young man who, beneath a gentle exterior, carries, as usual, a will of iron. It is needless to say that he surmounts all difficulties and marries the lady of his love. But the rubies have a baleful tendency; they have been the cause of all these complications, and no one will wear them.

A HISTORY OF THE UNITED STATES FOR SCHOOLS; with an Introductory History of the Discovery and English Colonization of North America. With maps, plans, illustrations, and questions. By Alexander Johnston. New York: Henry Holt & Co. $1.40.

To the many histories of the United States another is added. The reader at once asks, why? The answer may be found when the special purpose for which this book has been written is understood. It is not intended as a story book, neither is it a picture book. Illustrations in the shape of pictures have been restricted to cuts of such persons and things as are pertinent to the text. They have been introduced with regret, only because of a prejudice to a school history not so illustrated. The design of this history is so to group those important events that shed light on the duties of the citizen, as to give him just such knowledge as he needs. It is in fact a history of the United States for the young voter. All that is not essential to the main subject is omitted. The history of the time when there was no United States is condensed as much as possible, and as much space as possible is given to our own *national history*. The author has rigidly adhered to this one idea, and eliminated everything not essential to the main end in view. The result is he has compressed a vast amount of information within the 478 pages of this volume. It is well printed, carefully edited, excellently bound, and is a valuable addition to our stock of school text-books.

### MAGAZINES.

The current September issue of the *Magazine of American History* presents an exceptionally valuable paper, by Mrs. Martha J. Lamb, on "General Grant's Resting Place." Other papers of interest are "Washington's First Public Service," by T. J. Chapman, A. M.; "Baltimore in 1861," by Major-General John C. Robinson; "Beginnings of the Civil War in America," by General Thomas Jordan. C. S. A.; "The Military Affairs of New York State in 1861," by General Meredith Read; "The Closing Days of Louis XIV." by Hon. James W. Gerard, and "Tributes to General Grant," by several prominent people.

*The Art Amateur* for September contains some charming figure designs, suitable for sketching on linen, and outline embroidery.

### LITERARY NOTES.

The Leonard Scott Publication Co., publishers of *Shakespeariana* and the *Fortnightly Review*, have completed arrangements for doing their own printing, and in future, with September issues, their reprints will appear promptly. The printing department of the company will be known as The Ferrer Press, Philadelphia.

### ANNOUNCEMENTS.

The price of *Boyd's Indian Names*, recently noticed by us, is $1.25, including postage. Address York, Penn.

Perry's "Sanskrit Primer," now in press of Messrs. Ginn & Co., will be ready Oct. 15.

### PAMPHLETS.

Health Statistics of Women College Graduates; Report of a Special Committee of the Association of Collegiate Alumnæ; Annie G. Howe, Chairman. Together with statistical tables collected by the Massachusetts Bureau of Statistics and Labor.

Catalogue of the Owenton (Ky.) High School, Walter S. Smith, M.S., Principal.

Catalogue of Cherokee National Male Seminary, 1884-85. W. I. Davis, A.M., Principal.

Annual Report of the Kansas City Public Schools, 1884-5. J. M. Greenwood, Superintendent.

Catalogue of the Illinois State Normal University, 1884-5, Normal, Ill., for the year ending June 25, 1885. Edwin C. Hewitt, LL.D., President.

The Interoceanic Problem and Scientific Solution. An address before the American Association for the Advancement of Science, at Ann Arbor, Mich., Aug. 26, 1885. By Elmer L. Corthell.

Catalogue of the State Normal School, Fredonia, N. Y. Francis B. Palmer, Ph.D., Principal.

Tongalo University, Miss., 1884-5. Rev. G. Stanley Pope, A.M., President.

Announcement of School of Elocution and Expression. Mrs. Katharine Westendorf, Principal, Cincinnati, Ohio.

The North, Central and South American Exposition, promotive of the commercial and industrial unity of the Three Americas. Statement, Prospectus and Description, New Orleans, 1885.

Report of the Public Schools of Steelton, Pa., 1884-85. L. E. McGinnes, A.M., Principal.

Catalogue of Kingsley Seminary. Joseph H. Ketron, A.M., Principal, 1884-85, Bloomingdale, Tenn.

Proceedings of the Georgia State Teachers' Association, held at Atlanta, July 21, 22, 23, 1885. W. J. McKemie, A.M., President.

Third Annual Catalogue of the Iuka Normal Institute. H. A. Dean, A.M., Principal, Iuka, Miss.

Address of Hon. E. W. Sutherland, before the Alumni of the Louisiana University.

Catalogue of the Academic Department of the Batavia Union School. Gardner Fuller, A.M., Supt.

Annual Reports of the School Committee of Newport, R. I., of the head master of Rogers High School, Frederick W. Tilton, A.M., and the Supt. of Public Schools, George A. Littlefield, A.M.

### BOOKS RECEIVED.

Indian Local Names with their Interpretation. By Stephen G. Boyd. York, Pa.: Published by the Author.

History of the United States for Schools. By Alexander Johnston. New York: Henry Holt & Co. Cloth. $1.50.

Due South, or Cuba Past and Present. By Maturin M. Ballou. New York: Houghton, Mifflin & Co. Cloth. $1.50.

Some Noted Princes, Authors, and Statesmen of our Time. By Canon Farrar, James T. Fields, Archibald Forbes, E. P. Whipple, James Parton, Louise Chandler Moulton, and others. Edited by James Parton. New York: T. Y. Crowell & Co.

Chemical Problems. By Dr. Karl Stammer. Philadelphia: P. Blakiston, Son & Co. Cloth. 75 cents.

Book-keeping Simplified. By D. B. Wagner. Philadelphia: Charles R. Deacon. Cloth. $1.00.

Twelfth Night. Clarendon Press Series. Edited by William Aldis Wright, A.M., LL.D. Oxford Clarendon Press. 40 cents.

The Educational Clock Dial. New York: J. W. Schermerhorn & Co. 50 cents.

American Commonwealths, Michigan, a History of Governments. By Thomas McIntyre Cooley. Boston: Houghton, Mifflin & Co. Cloth. $1.25.

The Story of Greece. By Prof. James A. Harrison. New York: G. P. Putnam's Sons. $1.50.

Representation Essays From "Prose Masterpieces." New York: G. P. Putnam's Sons. Cloth. $2 00.

Plutarch's Lives. Vols. I and II. Selected and Edited by John S. White, LL.D. New York: G. P. Putnam's Sons. Cloth. $1.25 each.

The Histories of Herodotus. Vols. I and II. Edited by John S. White, LL.D. New York: G. P. Putnam's Sons. Cloth. $1.25 each.

Uncle Tom's Cabin, or Life Among the Lowly. By Harriet Beecher Stowe. Boston: Houghton, Mifflin & Co. Cloth. $1.00.

Elementary Algebra. By H. S. Hall, B.A., and R. S. Knight, B.A. New York: Macmillan & Co. Cloth. $1.10.

Complete Rhetoric. By Alfred H. Welsh, A.M. Chicago: S. C. Griggs & Co. Cloth. $1.50.

The Study of Political Economy. By J. Lawrence Laughlin, Ph.D. New York: D. Appleton & Co. Cloth. $1.00.

Why we Believe the Bible. By J. P. T. Ingraham, S.T.D. New York: D. Appleton & Co. Cloth. 60 cents.

A Vagrant Wife. By Florence Warden. New York: D. Appleton & Co. Paper. 25 cents.

The Old Doctor. By John Vance Cheney. New York: D. Appleton & Co. Paper. 50 cents.

Sixth or Classic English Reader. By William Swinton. New York: Ivison, Blakeman, Taylor & Co. Cloth.

First Lessons in Physiology and Hygiene. By Thomas H. Dinsmore, Jr., Ph.D. New York: Potter, Ainsworth & Co.

Phil Vernon and His School Masters. A Story of American School Life. By Byron A. Brooks. New York: Phillips & Hunt. Cloth.

A Primer, Embracing the Sentence and Phonic Methods of Teaching Sight Reading. By J. H. Stickney. Boston: Ginn & Co. Price, 24 cents.

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DEAR TEACHERS:

We will be pleased to send a sample copy of the consolidated *Treasure-Trove and Pupils' Companion* to the address of each one of you who has not yet examined this magazine. We believe that every teacher is heartily interested in their pupils having *pure, entertaining reading* placed before them. This we are endeavoring to provide, and we ask your coöperation in behalf of their interests. The pernicious effects of the vile, trashy reading with which this country is being flooded by unprincipled men who would ruin our boys and girls in order to add to their own gains, *is terrible to contemplate.* We believe you, as teachers, realize this, and are ready to welcome and aid any means which tend to offset its evil effects.

"The reading which molds character is usually done in early life." How very important it is, then, that we, who have the direction of the young people, should seek to place in their hands such reading as *we know* is entertaining and elevating in its nature and influence. In our *Treasure-Trove and Pupils' Companion* we are endeavoring to provide just that class of reading which you can endorse—wide-awake, pure, entertaining, instructive, and elevating. We believe the magazine that will be the most successful in reaching the attention and favor of our young folks—is one the arrangement of which, will make it of interest both in the school-room and at the home circle.

By the SPECIAL ARRANGEMENT of *Treasure-Trove and Pupils' Companion* it is also of practical value to TEACHERS *in their work.* In connection with many attractive and entertaining stories and sketches of a general nature in each number, there are also articles bearing directly upon the branches of study taught in the school-room. These articles are written especially for the magazine by successful teachers throughout the country, and are of such a pleasing, attractive manner, that they gain the pupils' attention from the beginning, thus creating in their minds an additional interest in their studies at school, and imparting a desire to select of their own choice, instructive reading, rather than that of a light, sensational nature.

We have received thousands of testimonials from Teachers who say they find it of great value to themselves, as it brings them interesting and instructive reading, *carefully arranged and condensed for immediate use.*

Its use by teachers and pupils brighten the school-life experiences. It *is practical for Supplementary Reading in school.*

It is practical as a supplement to *all the branches of study taught.* It is entertaining for Home Reading.

Now, teachers, will you not earnestly aid us? We will send sample copies to all who would like to aid them in securing a club for the magazine in their schools.

For further particulars see advertisement in this number. Send for copy of September number, club rates, premium, offers, etc., etc. Yours very truly,

E. L. KELLOGG & Co., Publishers.
C. W. HAGAR,
Formerly of *Pupils' Companion.*

## Publishers' Department.

Have you obtained a school? Do you want a teacher? Both these questions are being vigorously pushed just at the present time; and those, on either side, that are asking them, will thank us for reminding them that the American School Bureau, 2 West 14th St., N. Y., R. E. Avery, manager, registers good teachers free, and has made a reputation for prompt and efficient service.

Among the new editions and comparatively new books on the educational list of Messrs. Cowperthwait & Co., of Philadelphia, may be noticed Monroe's Readers, Spellers and Vocal Charts; Warren's Geographies, Greene's Grammars; Powell's Language Series. The Business Standard Copy-Books, Apgars' Geographical Drawing-book, Appleton's Young Chemist, Royse's American Literature, Berard's New United States History, Goodrich's Child's United States History, Hagar's Mathematical Series, and Parker's Arithmetical Charts. We advise all teachers that are anxious to secure only the best to correspond with this house and obtain their Price-List and descriptive circulars, which are sent free on application.

The style of angular hand-writing for ladies is at present very much in vogue, and the Lockwood system by which it is taught is based upon correct and scientific principles. The style is deservedly popular, being very neat and plain, beside the distinguished appearance coveted by many The course of copy-books is published by George R. Lockwood, School-Book Depository, 812 Broadway, New York.

Teachers will find an ample fund of suggestion and practical help in some of the works published by Messrs. A. Flanagan, 163 Randolph St., Chicago. Among these books may be noted "Helps for Teachers," being practical work in Geography, by Henry McCormack, Professor of Geography in the Illinois Normal University; "How to Teach and Study U. S. History," by Jno. Trainer, County Supt. Macon Co., Ill., consists of Brace Outlines, Directions for Study, Queer Questions with Answers, and Review Questions, covering all important points in history; "Curious Cobwebs;" "Favorite Speaker Series," and Drawing Designs are also found on their new catalogue, which will be sent on application.

Many good things have been said concerning Johnson's Universal Cyclopædia, and now, since the New General Cyclopædia and Copperplate Atlas of the World has been put on the market, as many good things are being said of this. Mr. John D. Philbrick, ex-Supt. of Schools in Boston, says of it:

"We have, at length, the book of reference which has long been needed, namely, a cyclopædia of scientific and general information, adapted to the wants of those who have not the means to purchase nor the time to use a work of the magnitude of 'Johnson's Universal Cyclopædia.' By a judicious system of condensation, it has been rendered very comprehensive in respect to the topics treated, while kept within moderate bulk and price. This book of reference seems to me better adapted than any other within my knowledge, to supply the popular demand for a general book of reference, not only for family use, but for the use of common schools."

There is nothing like making school studies attractive, and few means have yet been devised that are better calculated to give real enjoyment and solid instruction at the same time, than Adams's "Solar Camera" for teaching geography and other studies. Descriptive circulars are sent free on application to Charles F. Adams, of the State Normal School, Worcester, Mass.


### "How's Your Liver?"

In the comic opera of "The Mikado" his imperial highness says:

"To make, to some extent
Each evil Liver
A running river
Of harmless merriment."

A nobler task than making evil livers, rivers of harmless merriment no person, king or layman, could take upon himself. The liver among the ancients was considered the source of all a man's evil impulses, and the chances are ten to one today that if one's liver is in an ugly condition of discontent, someone's head will be mashed before night!

"How's your liver?" is equivalent to the inquiry: Are you a bear or an angel to-day?

Nine-tenths of the "pure-cussedness," the actions for divorce, the curtain lectures, the family rows, not to speak of murders, crimes, and other calamities, are prompted by the irritating effect of the inactivity of the liver upon the brain. Fothergill, the great specialist, says this and he knows. He also knows that to prevent such catastrophes nothing equals Warner's safe cure, renowned throughout the world as a maker of

"Each evil Liver
A running river
Of harmless merriment."

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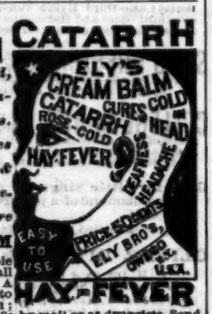
**CATARRH**




**HAY-FEVER**

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This school offers superior advantages to ladies who desire to become Kindergartners. Send for circulars to **Mrs. EUDORA HAILMAN,** La Porte, Ind.

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# RAVEN SHOE

Is absolutely the best. Softens leather, contains oil, gives *natural* finish, actually makes shoes wear longer.

BUTTON & OTTLEY,

**BUTTON'S**

# GLOSS DRESSING

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MFRS., NEW YORK.

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**CURE HEADACHE.**

Headaches are usually induced by costiveness, indigestion, foul stomach, or other derangements of the digestive system, and may be easily cured by the use of Ayer's Pills. Mrs. Mary A. Scott, Portland, Me., writes: "I had suffered dreadfully from Sick Headache, and thought myself incurable. Disorder of the stomach caused it. Ayer's Pills cured me entirely."

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John C. Pattison, Lowell, Nebr., writes: "I was attacked with Bilious Fever, which was followed by Jaundice. I was so dangerously ill, that my friends despaired of my recovery. I commenced taking Ayer's Cathartic Pills, and soon regained my customary strength and vigor. I feel certain that I owe my recovery to your invaluable Pills."

**CURE INDIGESTION.**

Ayer's Pills act directly on the digestive and assimilative organs, influencing healthful action, imparting strength, and eradicating disease. G. W. Mooney, Walla Walla, W. T., writes: "I have suffered from Dyspepsia and Liver troubles for years past. I found no permanent relief, until I commenced taking Ayer's Pills, which have effected a complete cure."

**CURE RHEUMATISM.**

Rheumatism is among the most painful of the disorders arising from vitiated blood and derangement of the digestive and biliary organs. Ayer's Pills relieve and cure Rheumatism when other remedies fail. S. M. Spencer, Syracuse, N. Y., writes: "I was confined to my bed, with Rheumatism, three months, but, after using a few boxes of Ayer's Pills, became a well man."

**CURE GOUT.**

S. Lansing, Yonkers, N. Y., writes: "Recommended to me as a cure for chronic Costiveness, Ayer's Pills have relieved me not only from that trouble, but also from Gout. If every victim of the disease would heed only three words of mine, I could banish Gout from the land. Those words would be, 'Try Ayer's Pills.'"

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Piles are induced by habitual constipation, debility, indigestion, or a morbid condition of the liver. A cure is best effected by the use of Ayer's Pills. John Lazarus, St. John, N. B., writes: "I was cured of the Piles by the use of Ayer's Pills. They not only cured me of that disagreeable disorder, but gave me new life and health."

**Sold by all Druggists.**

**Prepared by Dr. J. C. Ayer & Co., Lowell, Mass., U. S. A.**


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ESTABLISHED 1880.

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N. B. We have now on our books a large number of "calls for teachers" at good salaries.

**NEW DEPARTURE**
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Over 100 vacancies (May 9th) and more coming large variety; salaries, $300 to $2,500. Register *NOW*. Form for stamp.
SCHOOL OFFICERS WANTING TEACHERS will find our plan and service better than any hitherto offered. American School Bureau, 2 W. 14th St., N. Y. R. E. Avery, Manager.

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Introduces to colleges, schools, and families superior Professors, Principals, Assistants, Tutors, and Governesses for every department of instruction; recommends good schools to parents. Call on or address

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**WE HAVE NOW FIVE HUNDRED VACANCIES.**
and can recommend any teacher to a position in any grade immediately on receipt of application. We are establishing new branches and our facilities are rapidly increasing.
Registration fee $2.00.
*Two dollars will cover Registration in all Five of our Agencies.*
We need teachers and would like your application on our files. In sending application please state experience, position wanted, branches taught, reference, age, etc., and send copies of testimonials. Now is the time to apply
Ten dollars will be paid to any teacher who first informs us of a vacancy which we succeed in filling
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It affords me pleasure to state that the Penn'a Ed Bureau furnished us a teacher who is rendering satisfaction in her department. We consider the Bureau CONSCIENTIOUS and RELIABLE in the representations it makes and the teachers it furnishes. DR. NATHAN C. SCHAEFFER, Principal Keystone State Normal School. Kutztown, Pa.

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**BOOK AGENTS WANTED** for "PLATFORM ECHOES, or LIVING TRUTHS for Head and Heart." Now selling by thousands. A brand new book just completed by *John B. Gough.* *The grandest book of the age. Ministers say "Godspeed it". Everyone laughs and cries over it.* 640 pages. 227 splendid Engravings. Introduction by Rev. LYMAN ABBOTT. *It sells at sight.* Send for Circulars, *Extra Terms*, A. D. WORTHINGTON & CO., Hartford, Conn.

**HOME INSURANCE COMPANY OF NEW YORK.** Office 119 Broadway. Sixty-third Semi-Annual Statement, January, 1885.

| | |
|---|---|
| CASH CAPITAL, | $3,000,000 00 |
| Reserve Premium Fund, | 2,847,565 00 |
| Reserve for Unpaid Losses and Claims, | 405,798 64 |
| Net Surplus, | 1,141,726 91 |
| CASH ASSETS, | $7,395,090 55 |

**SUMMARY OF ASSETS.**

| | |
|---|---|
| Cash in banks, | $ 251,736 41 |
| Bonds & Mt'gages, being 1st lien on R'l Es't | 1,005,400 00 |
| United States Stocks. (market value), | 2,845,635 00 |
| Bank & R. R. Stocks & Bonds, (m'ket value) | 1,699,400 00 |
| State & City Bonds, (market value), | 222,000 00 |
| Loans on Stocks, payable on demand, | 254,050 00 |
| Interest due on 1st January, 1885, | 105,682 45 |
| Premiums uncollected & in hands of agents, | 356,002 72 |
| Real Estate, | 655,183 97 |
| TOTAL, | $7,395,090 55 |

CHAS. J. MARTIN, President.
D. A. HEALD, V. P.; J. H. WASHBURN, V. P. & S.
T. B. GREENE, and W. L. BIGELOW, Ass't Sec's.


## Publisher's Department.

THE J. B. WATKINS LAND MORTGAGE COMPANY.—Recently the business of loaning money on farm mortgages has been the object of some adverse comment in certain quarters. It has been asserted that through this system farmers are impoverished. There can be no more conclusive refutation of these allegations than is to be found in the appended facts regarding the J. B. Watkins Land Mortgage Company, of Lawrence, Kan., and Dallas, Texas. This company is believed to be the largest concern engaged in this line of business. It began operations in 1870, and has, in the 15 years of its existence, been remarkably successful. Mr. Watkins, the President, and his able corps of assistants, are thoroughly competent judges of land and its value, and give to each transaction their personal supervision. The amount loaned on farms, as compared with their actual market value, is so moderate that during 15 years of business the company has been conducted with remarkable safety. Their rate of interest is 7 per cent. per annum. The company's capital is $750 000, and the undivided profits are over $100,000, and prior to May 1, they had negotiated 10,400 mortgages, aggregating nearly $8,000,000. The prompt payment of the semi-annual interest at the National Bank of Commerce, in New York, is secured by the indorsement by the company of each coupon. The fact of the mortgages being made payable in New York, and their being guaranteed by the company, makes them practically Eastern securities. Mr. J. B. Watkins is a native of Pennsylvania, is rated by *Bradstreet's* as worth $2,036,000, and is regarded as one of the ablest financiers of this country, and possesses the entire confidence of the business community. Mr. Henry Dickinson, the manager, at their office, 243 Broadway, in New York, is also one of the Directors. In the West much of the recent development of that section is due to the financial assistance rendered through this organization.—*N. Y. Times.*

HAY FEVER is a type of catarrh having peculiar symptoms. It is attended by an inflamed condition of the lining membrane of the nostrils, tear-ducts, and throat, affecting the lungs. An acrid mucus is secreted, the discharge is accompanied with a burning sensation. There are severe spasms of sneezing, frequent attacks of headache, watery and inflamed eyes. Ely's Cream Balm is a remedy founded on a correct diagnosis of this disease, and can be depended upon. 50 cts. at druggists or by mail. Send for circular. Ely Bros., Druggists, Owego, N. Y.

Messrs. Milton Bradley & Co., of Springfield, Mass., are among the foremost in providing for the helps of kindergartens and primary schools, and one of their latest inventions is Educational Toy Money for Schools, with which the youngsters may learn to "make change" as readily as with the genuine. This is sent in any desired denominations and bulk as wanted.

Mothers, "individually and collectively, without a single exception, pronounce Madame Porter's Cough Balsam" the most pleasant and efficacious remedy for the cure of Coughs, Colds, Croup, Sore Throat, etc., etc., in children, that has yet been given to the public. They say it always acts like a charm. Children really like it. Price, 25, 50, and 75 cts. per bottle.

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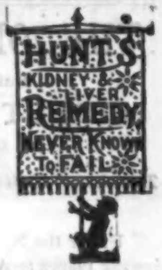
Back ache! Hunt's Remedy will cure pains in the back or loins, female diseases, nervous prostration, and kidney diseases.

Sick headache? Piles, constipation, bilious headache, and dyspepsia, are all speedily cured by Hunt's [Kidney and Liver] Remedy.


CURES ALL DISEASES OF THE KIDNEYS, LIVER, BLADDER, AND URINARY ORGANS, DROPSY, GRAVEL DIABETES, BRIGHT'S DISEASE, PAINS IN THE BACK, LOINS OR SIDE, NERVOUS DISEASES.

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**LIVING TESTIMONY.**

**Blacksmith.**

"Having had occasion to use a remedy for kidney troubles I purchased a bottle of HUNT'S [Kidney and Liver] REMEDY, and it completely cured me—have no indigestion, and am hearty and healthy for one of my years (65)."—J. E. Woodbury, Blacksmith, Manchester, N. H.

"Small beginnings lead to large endings."

**Carpenter.**

"I was troubled with a weakness of the Kidneys. I had to pass my water as many as fifteen times during the night. After having used the second bottle of HUNT'S [Kidney and Liver] REMEDY I found that all of my trouble was gone."—Joseph O. Miller, Carpenter, Xenia, Ohio.

"Be a friend to yourself, and others will."

**Fireman.**

"I have been a severe sufferer with a weakness of the kidneys, and I took a severe cold while on duty with the fire department. I had terrible pains in my back, and my water troubled me. HUNT'S (Kidney and Liver) REMEDY completely cured me."—H. A. Glass, Columbus, Ohio.

"To the good, night is not dark."

**A Sailor.**

"Captain John Kimball, Sailor, New London, Conn., writes:—'I was taken with severe pains in the small of my back in the region of the kidneys. I had the best medical attendance without experiencing any relief. I bought and used a bottle of HUNT'S (Kidney and Liver) REMEDY. Four bottles entirely cured me.'"

HUNT'S REMEDY CO., Providence, R. I.
C. N. CRITTENTON, General Agent, New York.

**Questions Answered ! ! ! !**

*Ask the most eminent physician*

Of any school, what is the best thing in the world for allaying all irritation of the nerves, and curing all forms of nervous complaints, giving natural, childlike, refreshing sleep always?

And they will tell you unhesitatingly
"*Some form of Hops ! !*"

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Ask any or all of the most eminent physicians:

"What is the only remedy that can be relied on to cure all diseases of the kidneys and urinary organs; Bright's disease, diabetes, retention, or inability to retain urine, and all the diseases and ailments peculiar to Women"—

"And they will tell you explicitly and emphatically "*Buchu !*"

Ask the same physicians

"What is the most reliable and surest cure for all liver diseases or dyspepsia, constipation, indigestion, biliousness, malaria, fever, ague, etc., and they will tell you

*Mandrake ! or Dandelion ! ! ! !*

Hence, when these remedies are combined with others equally valuable,

And compounded into Hop Bitters, such a wonderful and mysterious curative power is developed, which is so varied in its operations that no disease or ill-health can possibly exist or resist its power, and yet it is

Harmless for the most frail woman, weakest invalid, or smallest child to use.

CHAPTER II.

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"Almost dead or nearly dying"

For years, and given up by physicians, of Bright's and other kidney diseases, liver complaints, severe coughs, called consumption, have been cured.

*Women gone nearly crazy ! ! ! !*

From agony of neuralgia, nervousness, wakefulness, and various diseases peculiar to women.

People drawn out of shape from excruciating pangs of rheumatism, inflammatory and chronic, or suffering from scrofula.

Erysipelas!

"Saltrheum, blood poisoning, dyspepsia, indigestion, and, in fact, almost all diseases frail"

Nature is heir to

Have been cured by Hop Bitters, proof of which can be found in every neighborhood in the known world.

☞ None genuine without a bunch of green Hops on the white label. Shun all the vile poisonous stuff with "Hop" or "Hops" in their name.

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**A. LOVELL & CO., Publishers, 16 Astor Place, N.Y.**

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but for educational purposes under the recent laws,

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